Unclassified

# Canadian Integrated Public Health Surveillance

# PRODUCT CHANGE MANAGEMENT PROCESS

**Prepared For:**

**Centre for Surveillance Coordination,**
**Population and Public Health Branch**

## Health Canada

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# VERSION CONTROL

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| April 30, 2003 | Document updated with feedback received from CIPHS Product Management Team and CIPHS management | 2.0 |
| May 30, 2003 | Incorporation of stakeholder feedback | 3.0 |

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# 1.0 INTRODUCTION

## *1.1 Background*

Health Canada is in the process of defining a Product Change Management (PCM) process to govern and facilitate the on-going development of various electronic products as the result of evolving business requirements that could include:

- New program functionality
- Enhanced system functionality
- Adoption of national standards
- Enhancements to the enterprise architecture
- New Legislative requirements
- Repairing system defects

A preliminary PCM process is currently being defined for the web-enabled Public Health Information System (*i*-PHIS) that includes a significant role for the business stakeholders in the overall decision making governing the on-going development of this product. Once accepted, this PCM process is intended to become the model for other products such as the Laboratory Data Management System (LDMS), Registries, among other systems and databases. To facilitate understanding, the *i*-PHIS system is used for illustrative purposes in this document to propose a PCM process model that would be applicable to all systems governed by the Canadian Integrated Public Health Surveillance (CIPHS) Collaborative.

The CIPHS Collaborative is a diverse group of Federal, Provincial and Territorial partners including public health officials, information technology professionals, and managers. The CIPHS Collaborative is pioneering governance and management of shared F/P/T public health applications. It provides a forum where best practices and new ideas are being advanced for the development of improved public health services for Canadians. The "owner" of the PCM process is the CIPHS Collaborative who needs to be actively engaged in defining, reviewing, prioritizing and approving requests for changes that will ensure the *i*-PHIS system will remain responsive to the needs of the public health community. As an organized decision-making process, the PCM facilitates the exciting development of the *i*-PHIS product to meet the business needs of the public health community in Canada – and a model for the world

The PCM process is a best practice originally instituted by the IT community as a means to introduce standardized methods and procedures for the efficient and prompt handling of product changes throughout the System Development Life Cycle (SDLC). The business stakeholders play a key role in this process and need to have a clear understanding of their roles and responsibilities. The purpose of this document is to define, document and communicate in clear business terms:

- The purpose of the PCM process within the SDLC
- The roles and responsibilities of all the stakeholders during each phase of the SDLC and the interaction required among them to make the PCM process work
- The commitment required of each stakeholder at major decision points in the PCM process.

By knowing their roles and responsibilities in each phase of the process, the business stakeholders will understand the commitment required of them and can thus exercise their leadership responsibilities in an effective and efficient manner.

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## *1.2 Purpose of the Product Change Management Process*

The System Development Life Cycle (SDLC) consists of 6 distinct phases that together cover the range of activities needed to initiate an IT development project to its successful delivery to the customer. The GartnerGroup[1] has determined high level estimates for the time it takes, on average, to complete a particular phase in the overall product delivery schedule:

| **Product Phase** | **Percentage of Overall Effort** |
|---|---|
| Collection & Evaluation | 10% |
| Requirement Analysis | 20% |
| Product Planning/Approval | 10% |
| Development | 15% |
| Testing | 40% |
| Deployment and Evaluation[2] | 5% |
| Total | 100% |

PCM is a process that weaves through all of these 6 phases and facilitates the decision making process. Based on these percentages, 40% of a product's delivery time is dedicated to planning and scoping activities at the front end. Another 40% is spent on testing at the back end. The PCM process is very much in sync with this cycle as much

[1] The GartnerGroup is a reputable international consultancy firm that provides management advice on all aspects of Information Technology.

[2] Note that the Deployment phase is outside the scope of the PCM process as defined in this document. Once the CIPHS Product Development Team has delivered the latest version of the *i*-PHIS system, it is up to each jurisdiction to decide if and when to deploy it in their jurisdiction.

effort will be required of the business stakeholders to support the upfront planning effort and the backend testing effort. Please refer to Appendix A for high level workflow diagrams of the SDLC phases and the PCM process within it.

Within the CIPHS Collaborative, there are 7 distinct stakeholders. Their respective roles and responsibilities will be described in detail for each of the SDLC phases. The purpose of the PCM process is to enable the stakeholders to exercise their respective roles and responsibilities so that they can collectively fulfill their mandate as defined in the CIPHS Collaborative Teams of Reference[3] which sets out this leadership role for the business stakeholders as follows:

Under Mandate, the CIPHS Collaborative is to

"assume a **leadership** role in **defining, developing,** and **promoting** modular suite of integrated public health business applications and databases…"

Under Key Responsibilities, two management responsibilities are highlighted:

- Provide overall **strategic direction** related to the **development** of shared public health applications and databases i.e., adhere to national standards
- **Co-ordinate** the **future development** and **ongoing maintenance** of the shared applications

Under Guiding Principles, two are highlighted

- Be **user driven** and support the users business first
- Offer **shared management**, shared responsibilities, and shared benefits

Thus the PCM process is about facilitating the overall governance of the shared public health applications as it impacts on product development.

## *1.3 Definition of PCM*

The definition of the PCM process used in this document is a broad one that includes both incremental changes to an existing product as well as the introduction of major new functionality to existing products or the development of new products.

For incremental changes to the product, the PCM process defines the identification, documentation, prioritization, approval, development and deployment of the contents of a product release. For major enhancements to the functionality of existing products or for the development of new products, there is a pre- PCM phase that includes the development of a business case with a cost/benefit analysis and a review of vendor products. The approval of the CIPHS Executive Council is required before the proposed product starts the first phase of the SDLC.

[3] The Canadian Integrated Public Health Surveillance, CIPHS Collaborative, Terms of Reference, May 2003. Version 5.0.

## 1.4 PCM Objectives

The CIPHS Product Change Management process reflects 5 key objectives that are essential to the success of the CIPHS Collaborative and the PCM process itself:

- Strategic Management
- National Application
- Process
- Effective/Efficient
- Communications

**Strategic Management:**

The PCM process is really a management process that enables the business stakeholders to exercise their strategic management and approval functions in an organized and timely manner. The PCM process identifies the key decision points and the options available to the business stakeholders to provide direction to the CIPHS Product Management Team. This leadership role is exercised in each SDLC phase thus ensuring that the product development effort is guided by the business stakeholders who represent the greater public health community in Canada.

**National Application:**

The membership of the CIPHS Collaborative represents a broad cross section of the public health community within Canada. As such, a pan-Canadian perspective is built into its overall governance that will promote and foster strategic objectives that are better synchronized with the overall direction envisioned for public health.

**Process:**

The PCM process will facilitate orderly decision-making. PCM introduces standardized methods, processes and procedures for all changes. At each step of the way, the process identifies who/how/what is involved in the collaborative decision-making process that will result in an authorized change to the system. In this way, PCM facilitates the efficient and prompt handling of all proposed changes from the initial request for change to the testing of the *i*-PHIS application software.

**Effective/Efficient**

The PCM process is a cost effective process that ensures all stakeholders understand their roles and responsibilities and can exercise them in a professional and timely manner. As well, inputs and outputs for each SDLC phase have been clearly identified. Templates are being developed to assist stakeholders in documenting information in a thorough and standard way. For example, an *i*-PHIS Change Submission form[4] has been developed to

[4] A sample of the form template can be found in Appendix B.

solicit information, using a standard format, needed to evaluate a proposed request for change. The form has been created to meet the informational needs of both the CIPHS Collaborative and the CIPHS Product Development Team. The result is an efficient process that will focus on the work at hand and enable all stakeholders to be more effective in carrying out their responsibilities.

**Communications**

The PCM process facilitates good communications as transparent as possible. Information on specific CRs is posted on a secure web site[5] for review and comment by the CIPHS Collaborative membership. Status updates are also posted to keep the CIPHS Collaborative membership informed on an on-going basis. The decisions of the Council are posted as well together with information on the contents and the schedules for upcoming releases.

## *1.5 Scope*

The scope of this document is to define the PCM process and the roles and responsibilities the stakeholders during each of the SDLC phases.

## *1.6 Methodology & Approach*

As noted above, the PCM process is embedded in all the 6 phases of the SDLC. Although there are approval points throughout all of the 6 phases, none is as important as the approval required after the Product Planning phase. Therefore, a new phase, "Approvals" has been added to the SDLC. This distinctive phase will highlight the critical decision-making that has to take place at this point and outline the factors that need to be considered in reaching a decision. Thus the 6 phases have been expanded to 7 to include an "Approvals" phase:

- 1.0 - Collection & Evaluation
- 2.0 – Requirements Analysis
- 3.0 – Product Planning
- 4.0 - Approvals
- 5.0 - Development
- 6.0 – Testing and Quality Assurance (QA)
- 7.0 – Deployment and Evaluation[6]

For each Phase, an overview description is provided using a table format below:

[5] The secure web site is a password accessed intranet site designated for the use of the CIPHS Collaborative membership only. The broader Public Health Community will continue to be served by the CIPHS web site which is an internet site accessible to all internet users. General information pertaining to future *i*-PHIS releases will be posted here to keep all public health professionals informed across Canada.

[6] For Phase 7.0, the Evaluation Phase is not a stand-alone phase like the others but rather is built into all the preceding phases.

| PHASE | TITLE |
|---|---|
| **PURPOSE** | ***The objective and goal of each phase*** |
| **INPUT** | ***Identification of the key pieces of information needed by each phase*** |
| **KEY RESULTS/ OUTCOMES** | ***Summary of the key decisions or actions required in each phase that become the inputs for the next phase*** |

As well, for each Phase, the role of each stakeholder is defined as well as their specific responsibilities using a table format below:

| **STAKEHOLDER** | ***Each stakeholder's roles and responsibilities are described using a unique colour code as follows:*** |
|---|---|
| **CIPHS Executive Council (Council)**<br>• The governing body of the CIPHS Collaborative. | |
| **CIPHS Collaborative Product Steering Committee (Subcommittee)**<br>• A committee of CIPHS program, IT, Collaborative and Executive Council members responsible for guiding the PCM process. | |
| **CIPHS Product Management Team (Product Manager)**<br>• Responsible for managing the CIPHS Product Development Team | |
| **CIPHS Collaborative (Collaborative)**<br>• A diverse group of Federal, Provincial and Territorial partners including public health officials, IT professionals, and managers pioneering governance and management of shared F/P/T public health applications | |
| **Public Health Community**<br>• The user community accessing the shared F/P/T public health applications in the products in the performance of their duties. | |
| ***i*-PHIS Program/IT Advisory Group (Program/IT Advisory Group)**<br>• Program Advisory Group is comprised of a broad group of stakeholders on the program side who provide a longer term perspective and advise on matters pertaining to public health<br>• The IT Advisory Group is comprised of F/P/T professionals on the IT side who provide technical guidance on matters pertaining to the technical and architectural development of the product | |
| ***i*-PHIS Standing Focus Group (Focus Group)**<br>• A sub group created by and accountable to the Program Advisory Group or the IT Advisory Group to investigate and make recommendation on issues requiring resolution in the short or near term | |
| **INPUT** | ***Identification of the key pieces of information needed by a stakeholder to make a decision or take a particular course of action during a particular phase*** |

| | |
|---|---|
| **OUTPUT** | ***Identification of the key decisions or actions required of a stakeholder during each phase that become the inputs to the next phase*** |
| **TIMING CONSIDERTATIONS** | ***The PCM process is governed by time and budgetary constraints. Wherever applicable, such timing constraints will be identified so that the overall release schedule and budget are kept clearly in mind.*** |

## *1.7 Assumptions*

The following assumptions have been made in this document:

1. Each jurisdiction has an internal governance structure[7] in place whose mandate is to:
   - Manage change
     - Facilitate communications
     - Facilitate innovation
     - Prioritize Change Requests
     - Provide user training
   - Retain and encourage field/regional office involvement
   - Set direction and strategy
   - Establish funding
   - Manage the *i*-PHIS operations at all levels

2. The *i*-PHIS Change Submission form can only be sponsored by a member of the CIPHS Collaborative such as:
   - A Jurisdictional representative
   - A member of the Program Advisory Group
   - A member of a User Requirements Group i.e. Standing Focus Group
   - The Product Manager

3. All users of the *i*-PHIS system can propose requests for changes that identify new or enhanced business functionality; however, these requests for changes must be routed through their jurisdictional Collaborative representative authorized to submit formal *i*-PHIS Change Submission forms to the Product Manager.

4. Each jurisdiction is responsible for prioritizing the Change Requests being considered for the upcoming release and advising the Product Manager accordingly.

[7] Please note that the CIPHS Product Development Team is working on a draft proposal consisting of best practices for a CIPHS jurisdictional governance structure.

# 2.0 CHANGE MANAGEMENT PROCESS

The PCM process is now defined using the format described in section 1.6: Methodology and Approach[8].

## *2.1 Phase 1.0 – Collection & Evaluation*

| PHASE 1.0 | COLLECTION & EVALUATION |
|---|---|
| **PURPOSE** | **Phase 1.0 is the entry point of the PCM process whereby the Collaborative and the user community can identify problems and/or promote enhancements to the system. Each problem and/or request for change is then tracked and their statuses are updated as they move through the PCM process. Requests for change can enter the PCM process by two means: as a problem reported to the Help Desk or as formal request submitted by an authorized Collaborative sponsor.**<br><br>**When an *i*-PHIS user experiences a problem with the system, the problem must be reported to the Help Desk. The Help Desk will determine if the problem is the result of a system defect, commonly referred to as a bug. If the Help Desk confirms the existence of the system defect they will create a problem report record.**<br><br>**An authorized sponsor may complete and submit a formal *i*-PHIS Change Submission form. Using this form, the sponsor documents a short business case promoting the need for either enhanced system functionality or new system functionality. The completed form is forwarded to the Product Manager who is responsible for the following activities:**<br>• **Acknowledges receipt of the completed form** |

[8] See Appendix C for two different views of the PCM: 1) by Stakeholder; and 2) by Outputs.

| | |
|---|---|
| | • **Creates a Change Request Record (CR) on the Change Repository (database)**<br>• **Updates the CR with additional information, in consultation with the sponsor**<br>• **Determines if the CR goes through the fast track[9] or the regular PCM process stream** |
| **INPUT** | • **A system problem reported by an *i*-PHIS user that is confirmed as a system bug by the Help Desk.**<br>• **An *i*-PHIS Change Submission form sponsored by one of the following CIPHS Collaborative members:**<br>  • **A Jurisdiction**<br>  • **The Program Advisory Group**<br>  • **A User Requirements Group i.e. Standing Focus Group**<br>  • **The Product Manager**<br>  • **Public Health professional (working through their jurisdictional Collaborative representative)** |
| **KEY RESULTS/ OUTCOMES** | • **A Change Request record is created on the Change Repository database**<br>• **Depending on the urgency of the CR, the CR can either be fast tracked or processed through the regular PCM stream** |

### 2.1.1 CIPHS Collaborative Executive Council

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|---|---|
| **STAKEHOLDER** | Executive Council (Council) |
| **INPUT** | • CRs targeted for fast tracking indicating some urgency |
| **OUTPUT** | • Define the strategic direction for the CIPHS product at the beginning of the PCM process with input from the CIPHS Collaborative<br>• Establish pre-determined threshold criteria that governs what CRs can be routed through the fast track stream |
| **TIMING** | • Ensure the strategic direction is defined and disseminated well in advance of the next product |

[9] A CR is fast tracked if it is deemed to be operationally critical or required by law. For example, if a system problem disables the functioning of the system (or parts of it), a fast tracked approach may be required to restore system functionality as soon as possible. Another example would be a new legislated requirement that has an impact on the system i.e. a new communicable disease that has been added to the list of reportable diseases which now must be tracked and reported upon immediately.

| | |
|---|---|
| **CONSIDERATIONS** | development cycle<br>• Stay informed and be prepared to act quickly to a fast track CR request |

### 2.1.2 CIPHS Collaborative Product Steering Committee

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|---|---|
| **STAKEHOLDER** | CIPHS Collaborative Product Steering Committee (Subcommittee) |
| **INPUT** | • Strategic direction for product development as approved by Council<br>• Fast track threshold criteria as defined by Council<br>• *i*-PHIS Change Submission forms forwarded by the Product Manager<br>• CRs targeted for fast tracking |
| **OUTPUT** | • Contribute to defining the strategic direction for product development<br>• Reviews CRs that have been received<br>• Keeps Council informed of any CRs proposed for fast tracking |
| **TIMING CONSIDERATIONS** | • Keep informed and be prepared to act quickly once a fast track CR request is received from the Product Manager |

### 2.1.3 CIPHS Product Manager

| | |
|---|---|
| **STAKEHOLDER** | CIPHS Product Management Team (Product Manager) |
| **INPUT** | • Strategic direction for product development as approved by Council<br>• Fast track threshold criteria as defined by Council<br>• Problems reported to the Help Desk<br>• *i*-PHIS Change Submission forms |
| **OUTPUT** | • Contributes to defining the strategic direction for product development<br>• Reviews *i*-PHIS Change Submission form for completeness and may consult with the sponsor to solicit further information<br>• Creates a Change Request (CR) record<br>• Makes a determination as to whether the CR is critical and needs to be fast tracked or go through the regular stream<br>• Advises Subcommittee of CRs recommended for fast tracking immediately<br>• Directs fast tracked CRs to immediately undergo a preliminary technical impact assessment and costing analysis |

| | |
|---|---|
| | • Sponsors and submits *i*-PHIS Change Submission forms |
| **TIME CONSIDERATIONS** | • Reacts quickly to a critical system problems or urgent new legal requirements and takes immediate steps to invoke the fast track course of action if appropriate |

### 2.1.4 CIPHS Collaborative

| **STAKEHOLDER** | CIPHS Collaborative (Collaborative) |
|---|---|
| **INPUT** | • Feedback from their jurisdictional constituency proposing new or enhanced system functionality<br>• Strategic direction for product development as approved by the Council |
| **OUTPUT** | • Contribute to defining the strategic direction for product development<br>• Sponsor and submit *i*-PHIS Change Submission forms<br>• Forward a preliminary *i*-PHIS Change Submission form to the Program Advisory Group and/or a Focus Group to solicit more information and support |
| **TIMING CONSIDERATIONS** | • None applicable during this Phase |

### 2.1.5 Public Health Community

| **STAKEHOLDER** | Public Health Community |
|---|---|
| **INPUT** | • General news as posted on the CIPHS web site<br>• The Help Desk will log a reported problem and respond to a user in two ways:<br>o Confirm the existence of a system defect or bug back to the user and suggest a work-around if possible; or<br>o Advise the user that the reported problem is not a system defect but rather an identification of new system functionality<br>• Recommend that the user contact their Collaborative representative for further action |
| **OUTPUT** | • Report system problems to the Help Desk<br>• Identify new or enhanced functionality to their jurisdictional Collaborative representative who may sponsor and submit an *i*-PHIS Change Submission form |
| **TIMING CONSIDERATIONS** | • Report any system problems to the Help Desk immediately |

### 2.1.6 *i*-PHIS Program/IT Advisory Group

| | |
|---|---|
| **STAKEHOLDER** | *i*-PHIS Program/IT Advisory Group (Program/IT Advisory Group) |
| **INPUT** | • Draft *i*-PHIS Change Submission forms from other stakeholders<br>• Strategic direction for product development as approved by Council<br>• Request for input on proposed fast tracked CRs |
| **OUTPUT** | • Contribute to defining the strategic direction for product development<br>• Sponsor and submit an *i*-PHIS Change Submission form<br>• Respond to requests for input to proposed *i*-PHIS Change Submission forms<br>• Provide feedback on proposed fast tracked CRs if requested |
| **TIMING CONSIDERATIONS** | • Respond quickly for input to proposed fast tracked CRs |

### 2.1.7 *i*-PHIS Standing Focus Group

| | |
|---|---|
| **STAKEHOLDER** | *i*-PHIS Standing Focus Group (Focus Group) |
| **INPUT** | • Draft *i*-PHIS Change Submission forms from other stakeholder<br>• Strategic direction for product development as approved by Council |
| **OUTPUT** | • Contribute to defining the strategic direction for product development<br>• Sponsor and submit an *i*-PHIS Change Submission form<br>• Respond to requests for input to proposed *i*-PHIS Change Submission forms |
| **TIMING CONSIDERATIONS** | • None applicable during this Phase |

## 2.2 Phase 2.0 - Requirements Analysis

| PHASE 2.0 | REQUIREMENTS ANALYSIS |
|---|---|
| **PURPOSE** | **The purpose of this phase is threefold:**<br>**(1) Process fast tracked CRs through this analysis phase as quickly as possible**<br>**(2) Perform a technical analysis of the regular stream CRs including an impact assessment and costing analysis**<br>**(3) Offer an opportunity for the Collaborative membership to provide feedback on CRs that have been posted on the secure web site.**<br><br>**This phase allows the Collaborative membership to express their support for proposed CRs that address their most important business needs. Their feedback will help the Product Manager to prioritize the CRs.** |
| **INPUT** | • **Impact assessments for proposed fast tracked CRs so that their criticality, scope and cost can be fully assessed by the Product Manager and provided to the Subcommittee and Council**<br>• **Feedback from the Collaborative membership on the regular stream CRs so that priorities can be established** |
| **KEY RESULTS/ OUTCOMES** | • **Approval/rejection to fast track a CR**<br>o **Approved fast tracked CR goes directly to Phase 5: Development**<br>• **Posting of all regular stream CRs on the secure web site**<br>• **Once a targeted release date has been determined, a cut off date will be announced and the Collaborative members will be given 30 working days to provide their feedback on the CRs listed on the secure web site**<br>o **The Collaborative members will be given a chance to record their level of support by checking of the appropriate rating box for each CR:**<br>▪ **Critical – 5 points (Must have)** |

| | |
|---|---|
| | ▪ **High Priority – 3 points (Important i.e. really like to have)**<br>▪ **Medium Priority – 2 points (Nice to have but can live without if necessary)**<br>▪ **Low Priority – 1 point**<br>o **At the end of the 30 working days, the voting results will be tabulated and a preliminary list of prioritized CRs created that reflect the business priorities of the Collaborative**<br>• **For each critical and high priority CR, the following action will be taken:**<br>o **Detailed technical analysis performed**<br>o **Overall impact assessment evaluated**<br>o **Cost of CR determined**<br>• **The CRs rated low may be closed at this point or deferred until the next release**<br>• **A Requirements Package Plan is produced consisting of new and existing CRs that are recommended for further consideration in Phase 3.0: Product Planning** |

### 2.2.1 CIPHS Collaborative Executive Council

| **STAKEHOLDER** | CIPHS Collaborative Executive Council (Council) |
|---|---|
| **INPUT** | • Recommendations from Subcommittee on CRs that are recommended for fast tracking<br>• Recommendation from Subcommittee on Product Manager's request for permission to exceed fast track criteria thresholds |
| **OUTPUT** | • Provide overall strategic direction for the development of the current Product Development Plan<br>• Approve/reject recommendation to fast track a CR<br>• Approve/reject recommendation to exceed established fast track criteria thresholds<br>• Review and update the fast track criteria thresholds criteria as required |
| **TIMING CONSIDERATIONS** | • Due to the urgency of fast tracked CRs, Council needs to respond within 30 working days |

### 2.2.2 CIPHS Collaborative Product Steering Committee

| **STAKEHOLDER** | CIPHS Collaborative Product Steering Committee (Subcommittee) |
|---|---|
| **INPUT** | • Fast tracked CRs recommended by the Product Manager<br>• Request from Product Manager for permission to exceed |

| | |
|---|---|
| | fast track criteria thresholds |
| **OUTPUT** | • Table a recommendation to Council to approve/reject request to fast track a CR<br>• Table a recommendation to Council to approve request to exceed fast track criteria thresholds |
| **TIMING CONSIDERATIONS** | • Due to the urgency of fast tracked CRs, Subcommittee needs to review and table its recommendation to Council within the 5 working days |

### 2.2.3 CIPHS Product Manager

| | |
|---|---|
| **STAKEHOLDER** | CIPHS Product Management Team (Product Manager) |
| **INPUT** | • The technical impact assessment and costing analysis for proposed fast tracked CRs<br>• Feedback from the Collaborative on the **regular stream CRs** posted on the secure web site |
| **OUTPUT** | • Prepares justification to Subcommittee for request to proceed with proposed fast tracked CR<br>• Actions decision rendered by Council re: fast tracked CR<br>  o If rejected – CR closed or goes through regular stream,<br>  o If approved - CR immediately jumps to Phase 5: Development Phase<br>• Prepares a formal request to Subcommittee for permission to exceed fast track criteria thresholds<br>• Posts **regular stream CRs** on the secure web site<br>• Notifies Collaborative membership of target release date and requests they prioritize the CRs posted on secure web site<br>• Prioritizes CRs based on the tabulation of voting results per CR from the Collaborative<br>• Conducts in-depth technical analysis, impact and costing assessments on critical and high priority CRs<br>• Produces a Requirements Package Plan consisting of prioritized and impacted CRs which becomes the key input to Phase 3: Product Planning |
| **TIMING CONSIDERATIONS** | • Priority is given to all proposed fast tracked CRs |

### 2.2.4 CIPHS Collaborative

| | |
|---|---|
| **STAKEHOLDER** | CIPHS Collaborative (Collaborative) |
| **INPUT** | • Regular stream CRs posted on the secure web site |
| **OUTPUT** | • Review CRs and provide additional input |

| | |
|---|---|
| | • Solicit input from the public health community in their jurisdiction as required<br>• Express level of support by checking off the applicable rating box for each CR: critical, high priority, medium priority, low priority |
| **TIMING CONSIDERATIONS** | • Have up to 30 days to voluntarily vote their preference against each posted CRs on the secure web site |

### 2.2.5 Public Health Community

| | |
|---|---|
| **STAKEHOLDER** | Public Health Community |
| **INPUT** | • The jurisdictional Collaborative representative may consult with their public health community on a specific CR that has been posted on the secure web site |
| **OUTPUT** | • Provide input as requested that is consolidated into a response through their jurisdictional Collaborative representative |
| **TIMING CONSIDERATIONS** | • None |

### 2.2.6 *i*-PHIS Program/IT Advisory Group

| | |
|---|---|
| **STAKEHOLDER** | *i*-PHIS Program/IT Advisory Group (Program/IT Advisory Group) |
| **INPUT** | • Regular stream CRs posted on the secure web site<br>• Receive request from the Product Manager to provide additional input on a specific a CR |
| **OUTPUT** | • Provide further business input from a expert perspective in public health and case management to a specific CR<br>• Provide further technical input as required<br>• Respond to Product Manager as requested |
| **TIMING CONSIDERATIONS** | • None |

### 2.2.7 *i*-PHIS Standing Focus Group

| | |
|---|---|
| **STAKEHOLDER** | *i*-PHIS Standing Focus Group (Focus Group) |
| **INPUT** | • Regular stream CRs posted on the secure web site<br>• May receive a request from the Product Manager to provide additional input on a specific a CR |
| **OUTPUT** | • Provide any further input to a CR from their specialized program or technical perspective<br>• Respond to Product Manager as requested |

| | |
|---|---|
| **TIMING CONSIDERATIONS** | • None |

## 2.3 Phase 3.0 - Product Planning

| PHASE 3.0 | PRODUCT PLANNING |
|---|---|
| **PURPOSE** | **The purpose of this phase is to create a Product Development Plan that becomes the approved content of the upcoming release.**<br><br>**Each CR will be subject to a set of criteria that will ultimately determine if it will be included in the Product Development Plan.**<br><br>**The following factors are considered:**<br>• **Is the CR in alignment with the strategic direction provided by the Council?**<br>• **Is the change technically feasible?**<br>• **What system bugs and changes are already in the pipeline?**<br>• **Are there any scheduling and budgetary constraints?**<br><br>**Based on the assessment above, not all CRs will make it past this stage. Some may be deferred and placed in the pipeline for reconsideration in the planning phase of future releases.**<br><br>**A Product Development Plan is the key input to Phase 4.0: Approvals, wherein the Council may decide to:**<br>• **Approve the Plan as is; or**<br>• **Approve the Plan subject to the successful resolution of noted issues; or**<br>• **Reject the Plan due to significant deficiencies and direct the appropriate revisions**<br>**Based on the input of the Council, a final Product Development Plan is created which becomes the formal input to Phase 5.0: Development.** |
| **INPUT** | • **Requirements Package Plan consisting of new and existing CRs that are recommended for further consideration in this Phase**<br>**Council's strategic direction guidelines** |

| | |
|---|---|
| **KEY RESULTS/ OUTCOMES** | • **A preliminary Product Development Plan consisting of:**<br>  o **CRs that offer new functionality**<br>  o **CRs that enhance existing functionality**<br>  o **System bug repairs that improve the quality of existing functionality**<br>• **The preliminary Product Development Plan will attempt to achieve maximum cost efficiencies by including as many bug repairs and low/medium priority CRs because they are located in the same system modules and programs that have been targeted for redevelopment by the approved critical and high CRs. In this way, the high cost of testing is minimized as a higher number of changes and repairs can be made to a computer module or program at the same time and tested together in one testing cycle**<br>• **CRs not included in the preliminary plan are deferred for consideration for future releases** |

### 2.3.1 CIPHS Collaborative Executive Council

| | |
|---|---|
| **STAKEHOLDER** | CIPHS Collaborative Executive Council (Council) |
| **INPUT** | • The preliminary Product Plan and the recommendations of the Subcommittee<br>• The Council's own strategic direction for the release |
| **OUTPUT** | • Approve/reject the recommendations of the Subcommittee on the preliminary Product Development Plan Develop |
| **TIMING CONSIDERATIONS** | • Keep in mind the overall release schedule and the expectations of the Collaborative anxious for additional functionality |

### 2.3.2 CIPHS Collaborative Product Steering Committee

| | |
|---|---|
| **STAKEHOLDER** | CIPHS Collaborative Product Steering Committee (Subcommittee) |
| **INPUT** | • The preliminary Product Development Plan from the Product Manager<br>• Council's strategic direction guidelines |
| **OUTPUT** | • Reviews the Plan against a set of evaluation criteria that include:<br>  o What is the reach of this CR i.e. local, pan-Canadian<br>  o What will the impact be on the user community |

| | |
|---|---|
| | i.e. in terms of new functionality, training<br>o Costing and funding considerations<br>o Alignment to the strategic directions of Council<br>• Provides feedback to the Product Manager and may request a revision to the preliminary Product Development Plan<br>• Prepares a set of recommendations for Council's review<br>• Forwards the preliminary Product Development Plan and their associated recommendations to the Council and requests approval to proceed with Plan |
| **TIMING CONSIDERATIONS** | • Keep in mind the overall release schedule and the expectations of the Collaborative anxious for new and enhanced functionality |

### 2.3.3 CIPHS Product Manager

| **STAKEHOLDER** | CIPHS Product Management Team (Product Manager) |
|---|---|
| **INPUT** | • Council's strategic direction guidelines in the determination of priorities for the preliminary Product Development Plan |
| **OUTPUT** | • Prepares a preliminary Product Development Plan recommending a set of CRs (enhancements and repairs to system bugs) for inclusion in the next release<br>o Maps each CR in the Requirements Package Plan against the Council's strategic direction to establish a priority listing<br>o Reviews existing CRs (enhancements and repairs to system bugs) that are already in the pipeline and maps to Council's strategic direction<br>• Forwards preliminary Product Development Plan to the Subcommittee |
| **TIMING CONSIDERATIONS** | • Product Development Plan should be forwarded to the Subcommittee at least 4 weeks in advance of the regularly scheduled Council meeting |

### 2.3.4 CIPHS Collaborative

| **STAKEHOLDER** | CIPHS Collaborative (Collaborative) |
|---|---|
| **INPUT** | • No role during this Phase |
| **OUTPUT** | |
| **TIMING CONSIDERATIONS** | |

### 2.3.5 Public Health Community

| STAKEHOLDER | Public Health Community |
|---|---|
| INPUT | • No role during this Phase |
| OUTPUT | |
| TIMING CONSIDERATIONS | |

### 2.3.6 *i*-PHIS Program/IT Advisory Group

| STAKEHOLDER | *i*-PHIS Program/IT Advisory Group (Program/IT Advisory Group) |
|---|---|
| INPUT | • Request from Subcommittee and /or Product Manager for additional input on specific CRs included in the preliminary Product Plan |
| OUTPUT | • Provide feedback as requested |
| TIMING CONSIDERATIONS | • Respond as expeditiously as possible |

### 2.3.7 *i*-PHIS Standing Focus Group

| STAKEHOLDER | *i*-PHIS Standing Focus Group (Focus Group) |
|---|---|
| INPUT | • Request from Subcommittee and /or Product Manager for additional input on specific CRs included in the preliminary Product Plan |
| OUTPUT | • Provide feedback as request |
| TIMING CONSIDERATIONS | • Respond as expeditiously as possible |

## 2.4 Phase 4.0 - Approvals

| PHASE 4.0 | APPROVALS |
|---|---|
| **PURPOSE** | **The purpose of this phase is for Council to approve a Product Development Plan for the upcoming release after reviewing the recommendations of the Change Management Subcommittee and careful review of the proposed plan's content, cost, scope and its alignment to their stated strategic direction.**<br><br>**Based on the feedback of the Council, a final Product Development Plan is produced that becomes the formal input to Phase 5.0: Development.** |
| **INPUT** | • **Preliminary Product Development Plan together with recommendations from the Subcommittee** |
| **KEY RESULTS/ OUTCOMES** | • **An approved Product Development Plan consisting of:**<br>o **enhancements that offer new functionality**<br>o **enhancements that improve upon existing functionality**<br>o **system bug repairs that improve the quality of the functionality already available**<br>• **Decision that a recommended CR is a bolt-on and not currently consistent with the direction of the core *i*-PHIS** |

### 2.4.1 CIPHS Collaborative Executive Council

| STAKEHOLDER | CIPHS Collaborative Executive Council (Council) |
|---|---|
| **INPUT** | • Preliminary Product Plan and accompanying recommendations from the Subcommittee |
| **OUTPUT** | • Assess the Plan in terms of:<br>o Addressing the Council's strategic direction<br>o Overall impact of release<br>o Consistent with established CIPHS standards<br>o Costing and funding<br>o Schedule for the Release |

| | |
|---|---|
| | • Decide on the status of the preliminary Product Plan<br>o Approve Plan as is<br>o Approve Plan subject to the successful resolution of noted issues<br>o Reject Plan due to major deficiencies and direct appropriate revisions |
| **TIMING CONSIDERATIONS** | • Keep in mind the overall schedule for the proposed release |

### 2.4.2 CIPHS Collaborative Product Steering Committee

| | |
|---|---|
| **STAKEHOLDER** | CIPHS Collaborative Product Steering Committee (Subcommittee) |
| **INPUT** | • Request by Council for further input or clarification on their recommendations |
| **OUTPUT** | • Present recommendations and Plan at Council meeting<br>• Work with Product Manager to update Plan if Council:<br>o Approves the Plan subject to modification<br>o Rejects the preliminary Product Plan |
| **TIMING CONSIDERATIONS** | • Keep in mind the overall release schedule |

### 2.4.3 CIPHS Product Manager

| | |
|---|---|
| **STAKEHOLDER** | CIPHS Product Management Team (Product Manager) |
| **INPUT** | • Request by Council for more information or clarification on the detailed contents of the preliminary Product Development Plan |
| **OUTPUT** | • Actions decision by Council<br>o If approved, directs the start of the Phase 5: Development<br>o If approved subject to modification, makes the appropriate revisions and re-submit plan for approval<br>o If rejected, rebuilds the preliminary Product Development Plan based on specific direction received from Council<br>• Posts Council's decision and the approved Product Development Plan and Schedule on the secure web site |
| **TIMING CONSIDERATIONS** | • Ensure availability for consultation by Subcommittee and Council during this critical approval phase |

### 2.4.4 CIPHS Collaborative

| STAKEHOLDER | CIPHS Collaborative (Collaborative) |
|---|---|
| INPUT | • Approved Product Development Plan and Schedule posted on the secure web site<br>• Applicable jurisdiction advised on Council's directive regarding a bolt-on requirement |
| OUTPUT | • No active role during this Phase |
| TIMING CONSIDERATIONS | |

### 2.4.5 Public Health Community

| STAKEHOLDER | Public Health Community |
|---|---|
| INPUT | • General Release information posted on the CIPHS web site |
| OUTPUT | • No active role during this Phase |
| TIMING CONSIDERATIONS | |

### 2.4.6 *i*-PHIS Program/IT Advisory Group

| STAKEHOLDER | *i*-PHIS Program/IT Advisory Group (Program/IT Advisory Group) |
|---|---|
| INPUT | • Request from Council for additional input and/or clarification on a specific CRs included in the preliminary Product Plan<br>• Approved Product Development Plan and Schedule posted on the secure web site |
| OUTPUT | • Provide feedback as requested |
| TIMING CONSIDERATIONS | • Respond as expeditiously as possible |

### 2.4.7 *i*-PHIS Standing Focus Group

| STAKEHOLDER | *i*-PHIS Standing Focus Group (Focus Group) |
|---|---|
| INPUT | • Request from Council for additional input and/or clarification on a specific CRs included in the preliminary Product Plan<br>• Approved Product Development Plan and Schedule posted on the secure web site |
| OUTPUT | • Provide feedback as request |
| TIMING | • Respond as expeditiously as possible |

| CONSIDERATIONS | |
|---|---|

## 2.5 Phase 5.0 - Development

| PHASE 5.0 | DEVELOPMENT |
|---|---|
| **PURPOSE** | **The purpose of this phase is to build the system enhancements and repair the system bugs as identified in the approved Product Development Plan. This phase is primarily managed by the Product Manager who is responsible for:**<br>o **Translating the CR business requirements into technical design and functionality specifications**<br>o **Modifying the existing system design as necessary to accommodate the new enhancements**<br>o **Building new application modules and programs if required**<br>o **Enhancing existing application modules and programs**<br>o **Repairing existing application software modules and programs**<br>o **Testing the new, enhanced and repaired application software modules and programs**<br>• **Emphasis of the test is on the technical integration within and among modules and programs**<br>**The updated and tested *i*-PHIS application becomes the formal input to Phase 6.0: Testing & QA.** |
| **INPUT** | • **The approved Product Development Plan** |
| **KEY RESULTS/ OUTCOMES** | • **An updated product consisting of:**<br>o **Documented technical specifications for all changes made to the application software**<br>o **Updated Design specification**<br>o **Modified product application software**<br>o **Documented Integration Test Plan**<br>o **Documented test results**<br>**Approval to proceed to the next Phase: Testing & QA which makes the modified product application software available for testing by the business stakeholders** |

### 2.5.1 CIPHS Collaborative Executive Council

| | |
|---|---|
| **STAKEHOLDER** | CIPHS Collaborative Executive Council (Council) |
| **INPUT** | • Status Reports from Product Manager |
| **OUTPUT** | • Assist in the resolution of major issues that may impact the release Plan and schedule<br>• Direct posting of release information on the secure web site so that Collaborative membership are kept informed |
| **TIMING CONSIDERATIONS** | • Conscious of the overall release schedule |

### 2.5.2 CIPHS Collaborative Product Steering Committee

| | |
|---|---|
| **STAKEHOLDER** | CIPHS Collaborative Product Steering Committee (Subcommittee) |
| **INPUT** | • No active role in this Phase |
| **OUTPUT** | |
| **TIMING CONSIDERATIONS** | |

### 2.5.3 CIPHS Product Manager

| | |
|---|---|
| **STAKEHOLDER** | CIPHS Product Management Team (Product Manager) |
| **INPUT** | • The approved Product Development Plan |
| **OUTPUT** | • Updates work plan and release schedule<br>• Initiates the regular development cycle:<br>  o Translates the business CRs into technical requirements<br>  o Updates the product Design as impacted by the approved CRs<br>  o Constructs new modules and programs and/or enhances/repairs the existing application software<br>  o Develops a Integration Test Plan to test the technical integration within and among modules and programs and between system interfaces<br>  o Conducts integration testing in the development environment<br>  o Documents test results and takes appropriate action if a test fails<br>• Approves migration of tested product application software to the Test environment for the Acceptance Test<br>• Prepares Status Reports for Council<br>• Posts release updates on the secure web site |

| | |
|---|---|
| **TIMING CONSIDERATIONS** | • Advises Council of any serious issues that may impact on the budget or the schedule |

### 2.5.4 CIPHS Collaborative

| | |
|---|---|
| **STAKEHOLDER** | CIPHS Collaborative (Collaborative) |
| **INPUT** | • Current release information posted on the secure web site |
| **OUTPUT** | • No active role during this Phase |
| **TIMING CONSIDERATIONS** | |

### 2.5.5 Public Health Community

| | |
|---|---|
| **STAKEHOLDER** | Public Health Community |
| **INPUT** | • General release information posted on the CIPHS web site |
| **OUTPUT** | • No active role during this Phase |
| **TIMING CONSIDERATIONS** | |

### 2.5.6 *i*-PHIS Program/IT Advisory Group

| | |
|---|---|
| **STAKEHOLDER** | *i*-PHIS Program/ITAdvisory Group (Program/IT Advisory Group) |
| **INPUT** | • Current release information posted on the secure web site<br>• Request from Product Manager for additional input on specific CRs to ensure the technical specification have properly interpreted the business requirements |
| **OUTPUT** | • Provide feedback as requested |
| **TIMING CONSIDERATIONS** | • Respond as expeditiously as possible |

### 2.5.7 *i*-PHIS Standing Focus Group

| | |
|---|---|
| **STAKEHOLDER** | *i*-PHIS Standing Focus Group (Focus Group) |
| **INPUT** | • Current release information posted on the secure web site<br>• Request from Product Manager for additional input on specific CRs to ensure the technical specification have properly interpreted the business requirements |
| **OUTPUT** | • Provide feedback as request |

| | |
|---|---|
| **TIMING CONSIDERATIONS** | • Respond as expeditiously as possible |

## 2.6 Phase 6.0 - User Testing & QA

| PHASE 6.0 | USER TESTING & QA |
|---|---|
| **PURPOSE** | **In this Phase, the larger CIPHS Collaborative has a chance to "test drive" the updated *i*-PHIS application software and upgraded technical environment in order to validate the successful delivery of:**<br>o **New functionality as defined in the approved CRs**<br>o **Enhanced functionality as defined in the approved CRs**<br>o **Improved functionality through bug repairs as reported on the Problem Reports**<br>o **An updated technical product that continues to integrate with the unique technical environments of the jurisdictions and their interfaces to other systems and databases all within acceptable performance response times**<br><br>**<u>Acceptance Test</u>**<br>**Members of the Advisory Group and the Focus Group are the prime candidates for conducting the Acceptance Test. They bring to the testing exercise a considerable wealth of program knowledge and expertise in public health and case management and are ideally suited to validate that the changes made to the application software system have successfully delivered the functionality requested in the approved CRs. They are not expected to become instant experts in the art of testing. They are expected to be able to translate their knowledge of public health into real life scenarios that can be tested. The focus of the Acceptance test will be on the specific functional changes made to the application software. The CIPHS Product Management team will support this exercise by documenting these scenarios into specific test cases. Any problems identified will be verified by the Product Manager and forwarded to the product development team for correction.**<br><br>**The outcome of the Acceptance test will determine whether or not the updated *i*-PHIS application software is ready for Beta testing.** |

| | |
|---|---|
| | **Beta Test**<br>**The purpose of the Beta Test is to test the updated *i*-PHIS system in a real live setting from both a functional and technical perspective.**<br><br>**From a functional perspective, the "testers" are public health professionals at one or more public health sites who will access the updated system during the normal course of their daily work activities. Whereas the Acceptance Test focused on testing all the CRs as approved in the Product Development Plan, the focus of the Beta test is to validate that the overall system is functioning normally including the interfaces to other systems and databases.**<br><br>**From a technical perspective, each jurisdiction may have to conduct its own Beta test. There is a requirement to test the technical integration of the upgraded product as each jurisdiction has its own unique technical environment. This is especially the case when the technical environment of the product has been upgraded. Such a test can also identify any potential telecommunication and performance problems that may have been introduced by the release.**<br><br>**A Beta test is conducted in the production environment and normally limited to a small number of actual work sites so that any reported problems can be quickly addressed and any negative impacts contained. The outcome of the Beta Test will determine if the updated *i*-PHIS system is ready for deployment throughout the jurisdiction. This is a decision that can only be made by the governing jurisdictional CIPHS council.[10]**<br><br>**The role of the CIPHS Product Management Team is to provide on-site support to the public health care professionals at the Beta site(s) so that they perform their regular responsibilities without getting too concerned with the mechanics of the testing process itself. As well, this team is to work closely with the jurisdictional IT group to co-ordinate the technical testing of the product in the jurisdiction's technical environment.**<br><br>**The successful completion of the Acceptance and Beta tests will bring the Change Management process to a close. The** |

[10] It is assumed that each jurisdiction will have a CIPHS governance structure in place.

| | |
|---|---|
| | **updated *i*-PHIS system has been QA'd and is now ready for deployment by the jurisdictions.**<br><br>**The next step in the Systems Integration Life Cycle is the Implementation Phase. Each jurisdiction is responsible for the planning and co-ordination necessary to deploy the updated *i*-PHIS application software to their users and ensure that they receive timely training and support during the initial implementation period.** |
| **INPUT** | • **Updated and technically tested product application software**<br>• **Updated with *i*-PHIS application software migrated to the Test environment for the Acceptance Test**<br>• **Updated *i*-PHIS application software migrated to the Production environment for the Beta Test**<br>• **Identification and commitment of Collaborative members to participate in the User Acceptance i.e. Focus Group**<br>• **Identification and preparation of the Beta site(s)**<br>• **Updated User and Training documentation**<br>• **Identification of Trainers for the Beta Test site** |
| **KEY RESULTS/ OUTCOMES** | • **Acceptance Test Plan and test scenarios**<br>• **Documented Acceptance Test results including problem reports**<br>• **Acceptance Test Summary Report with recommendations**<br>• **Authorization by Council to proceed to the Beta Test**<br>• **Beta Test Plan and high level test scenarios**<br>• **Documented Beta Test results including problem reports**<br>• **Beta Test Summary Report with recommendations**<br>• **Updated User and Training documentation**<br>• **Acceptance by each jurisdiction that the latest version of the *i*-PHIS application software has been successfully Beta tested and is now ready for deployment across the jurisdiction** |

### 2.6.1 CIPHS Collaborative Executive Council

| | |
|---|---|
| **STAKEHOLDER** | CIPHS Collaborative Executive Council (Council) |
| **INPUT** | • Status Reports from Product Manager<br>• The Acceptance Test Summary Report |

| | |
|---|---|
| | • The Beta Test Summary Report |
| **OUTPUT** | • Request Program Advisory Group and the Focus Group to participate in the upcoming Acceptance Test<br>• Request Collaborative to select a Beta site(s) for the Beta Test<br>• Request jurisdiction of the Beta site(s) to identify trainers for the Beta Test<br>• Review the Acceptance Test Summary Report and decide to:<br>o Authorize the Product Manager to proceed with the Beta Test; or<br>o Authorize the Product Manager to proceed with Beta Test subject to satisfactorily meeting certain conditions i.e. repairing reported problems; or<br>o Deny authorization to proceed, at this time, and identify the issues that must be addressed by Product Manager before authorization is granted<br>• Review the Beta Test Summary Report<br>o For information; or<br>o Direct the Product Manager to work with the Beta jurisdiction to resolve technical issues identified during the Beta test |
| **TIMING CONSIDERATIONS** | • Conscious of the overall release schedule<br>• Prompt review of the Acceptance and Beta Test Summary Reports |

### 2.6.2 CIPHS Collaborative Product Steering Committee

| | |
|---|---|
| **STAKEHOLDER** | CIPHS Collaborative Product Steering Committee (Subcommittee) |
| **INPUT**<br>**OUTPUT**<br>**TIMING CONSIDERATIONS** | • No active role in this Phase |

### 2.6.3 CIPHS Product Manager

| | |
|---|---|
| **STAKEHOLDER** | CIPHS Product Management Team (Product Manager) |
| **INPUT** | • Receives list of Acceptance Test testers<br>• Advised of the Beta site(s)<br>• Receives list of Beta testers<br>• Receives names of the Trainers for the Beta Test<br>• Direction from Council as a result of the Acceptance and |

| | |
|---|---|
| | Beta tests |
| **OUTPUT** | • Supports the Acceptance and Beta Test efforts:<br>o Sets up the appropriate testing environments for the Acceptance Test<br>o Supports the jurisdictions in setting up their Beta Test environments<br>o Provides orientation to Acceptance and Beta testers on the contents of the new release<br>o Assists in the testing process by<br>▪ Assisting in the documentation of the Acceptance Test Plan and scenarios<br>▪ Assisting in the documentation of the Beta Test Plan and scenarios<br>▪ Providing training on how to test and document test results including problem reports<br>▪ Investigating and validating problem reports documenting test failures<br>▪ Liaising with the technical development team to resolve reported problems and refresh application software for re-validation<br>▪ Liaising with the jurisdictional IT team as required<br>▪ Providing overall logistical support<br>• Validates User documentation<br>• Validates Training documentation for Train the Trainer sessions at the Beta site<br>• Conducts Train the Trainer sessions for the Beta site trainers<br>• Status reporting to Council highlighting any serious issues that may impact the release schedule |
| **TIMING CONSIDERATIONS** | • Manage the release schedule and keep schedule on track |

### 2.6.4 CIPHS Collaborative

| | |
|---|---|
| **STAKEHOLDER** | CIPHS Collaborative (Collaborative)[11] |
| **INPUT** | • Request for input on potential of Beta Test site(s)<br>• Request to identify trainers for the selected Beta Test site(s)<br>• The Beta Test Summary Report |

[11] At this point in the process, the Collaborative refers to the jurisdictional CIPHS governing Council

| | |
|---|---|
| **OUTPUT** | • Provide list of testers and trainers for the Beta test to the Product Manager<br>• Direct jurisdictional IT group to prepare for the technical Beta test and co-ordinate with the IT Advisory Group<br>• Recommends potential Beta site(s) to Council<br>• Review the Beta Test Summary Report and take one of the following three options:<br>  o Approval deploy upgraded product to all sites across the jurisdiction<br>  o Conditional Approval to deploy subject to the resolution of reported technical problems<br>  o Deny approval to deploy with justifying rationale |
| **TIMING CONSIDERATIONS** | • Respond as expeditiously as possible to the request to participate in the Beta Test |

### 2.6.5 Public Health Community

| | |
|---|---|
| **STAKEHOLDER** | Public Health Community |
| **INPUT** | • Request to become the Beta site(s) testers by jurisdictional Collaborative representative |
| **OUTPUT** | Beta Site(s)<br>• Assist in the development of the Beta Test Plan and scenarios<br>• Conduct tests to validate that the system (including interfaces to other systems and databases) functions properly<br>• Document test results<br>• Document problem reports<br>• Provide input to the Beta Test Summary Report |
| **TIMING CONSIDERATIONS** | • Work within the Beta Test schedule timeframes as defined in the release schedule |

### 2.6.6 *i*-PHIS Program/IT Advisory Group

| | |
|---|---|
| **STAKEHOLDER** | *i*-PHIS Program/IT Advisory Group (Program/IT Advisory Group) |
| **INPUT** | • Request to participate in the Acceptance Test and Beta Test<br>• Integration Test results in preparation for the Acceptance Test |
| **OUTPUT** | • Participate in the Acceptance Test (Program Advisory Group)<br>• Develop the Acceptance Test Plan and scenarios |

| | |
|---|---|
| | • Conduct tests to validate that the CRs and bug repairs have been successfully programmed in the updated *i*-PHIS application software<br>• Document Test results<br>• Document problem reports<br>• Prepare an Acceptance Test Summary Report and recommend that Council authorize the:<br>  o Approval to proceed to the Beta Test<br>  o Conditional Approval to proceed to the Beta Test subject to the resolution of reported problems<br>  o Deny approval to proceed with justifying rationale<br>• Participate in the Beta Test (IT Advisory Group)<br>• Co-ordinate with the jurisdictional IT group:<br>  o Develop a technical integration test plan<br>  o Conduct tests to validate the technical integration of the upgraded product in the jurisdiction's technical environment<br>  o Document Test results<br>  o Document problem reports<br>• Prepare a jurisdictional Beta Test Summary Report with recommendations |
| **TIMING CONSIDERATIONS** | • Work within the Acceptance Test schedule as defined in the overall release schedule |

### 2.6.7 *i*-PHIS Standing Focus Group

| **STAKEHOLDER** | *i*-PHIS Standing Focus Group (Focus Group) |
|---|---|
| **INPUT** | • Requested to participate in the Acceptance Test and/or Beta Test<br>• Integration Test results in preparation for the Acceptance Test |
| **OUTPUT** | • Participate in the Acceptance Test and/or Beta Test<br>• Develop the Acceptance/Beta Test Plan and scenarios<br>• Conduct tests to validate that the CRs and bug repairs have been successfully programmed in the updated *i*-PHIS application software<br>• Conduct tests to validate the technical environment of the upgraded product especially if technical changes are part of the release<br>• Document test results<br>• Document problem reports<br>• Provide input to the Program Advisory Group preparing the final Acceptance Test Summary Report with recommendations to Council |

| | |
|---|---|
| | • Provide input to the IT Advisory Group preparing the final Beta Test Summary Report |
| **TIMING CONSIDERATIONS** | • Work within the Acceptance Test schedule as defined in the release schedule |

# 3.0 BENEFITS

The PCM process offers many benefits to the business stakeholders of the CIIPS Collaborative:

- An organized decision-making process that facilitates the exciting development of the *i*-PHIS product to meet the business needs of the public health community in Canada – and a model for the world
- An understanding of their roles and responsibilities during each phase of the SDLC – and their respective accountabilities
- An understanding of the level of commitment required to participate as a stakeholder so that the appropriate arrangements can be made with respect to other commitments and obligations

As well, the PCM process offers these general benefits:

- Increased visibility and communications of changes to all the stakeholders
- Reduced negative impact of change from improved business and technical impact assessments
- Better assessment of the cost of proposed CRs before they are incurred
- Improved productivity of the user community by minimizing any potential system disruptions resulting in higher quality services
- Improved productivity of the product development team due to fewer distractions to repair faulty system changes
- Greater ability to absorb a large volume of CRs within the scope of a release

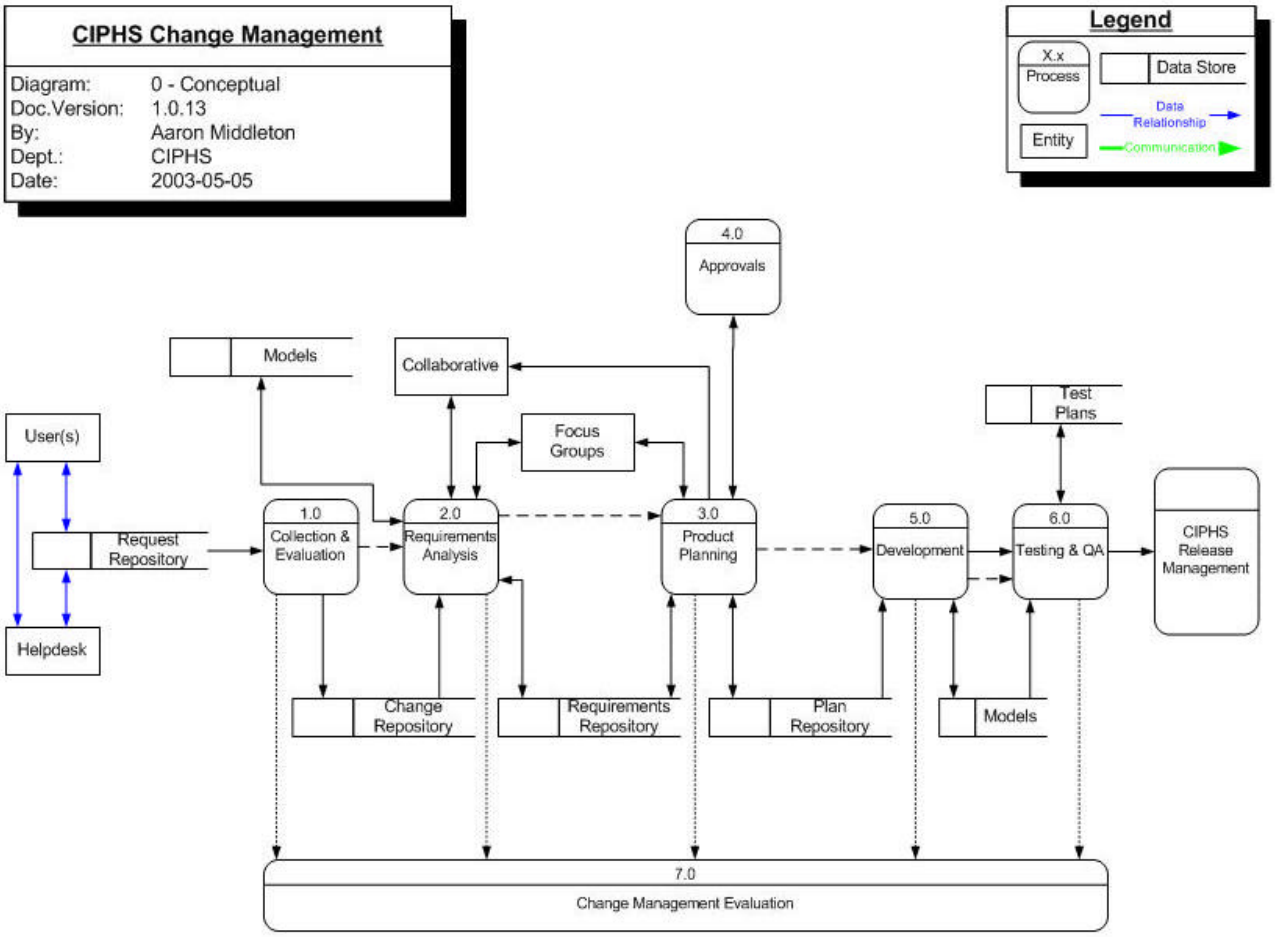
# 4.0 CONCLUSION

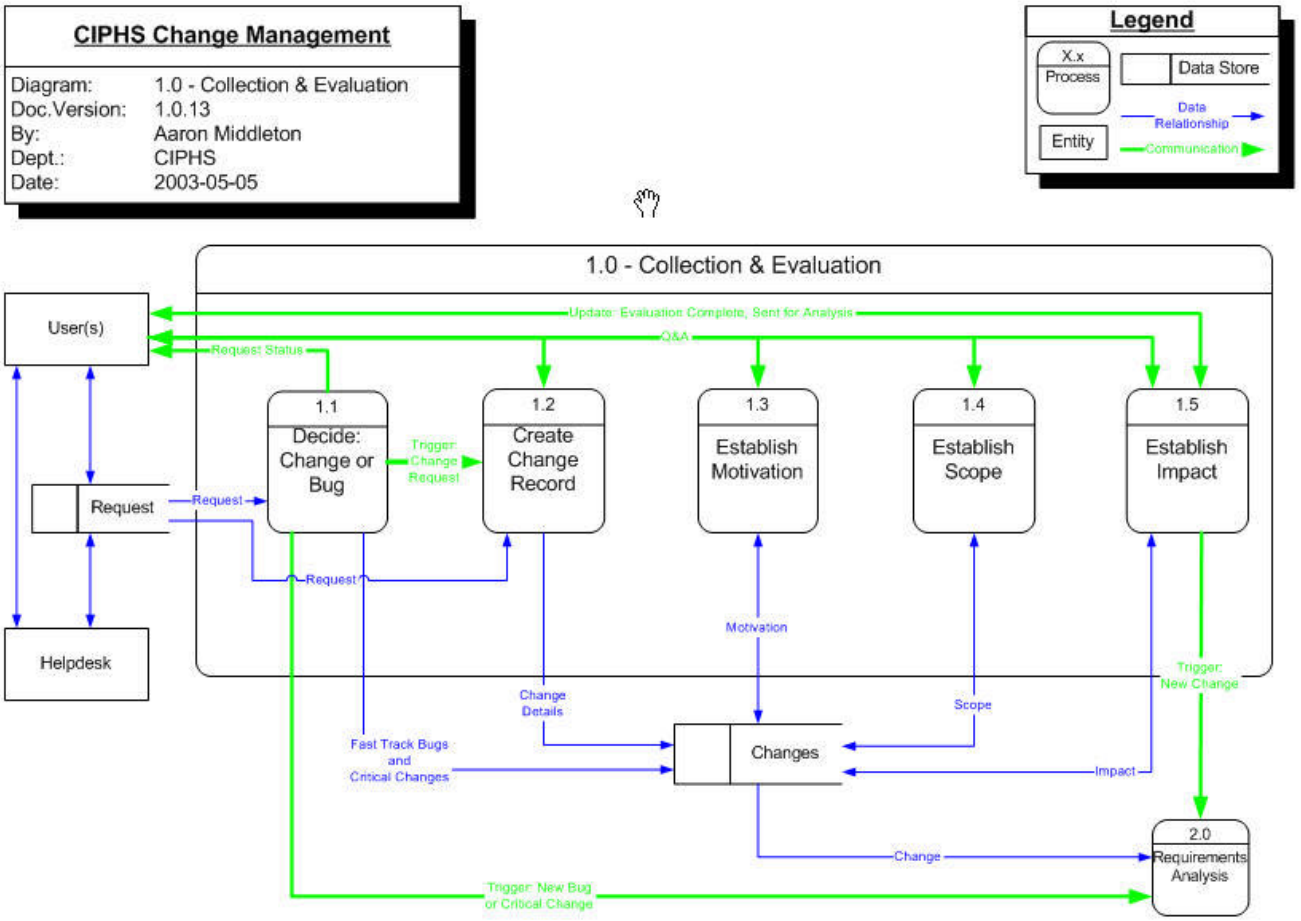
The PCM process is not about managing the day to day activities of an IT project. It is about implementing an effective and efficient decision-making process to ensure that the business stakeholders have control over the changes to the product through the exercise of their designated roles and responsibilities at key points in the SDLC. Through the PCM process, the Collaborative can exercise its leadership role by providing the strategic direction and approvals necessary to guide the on-going development of *i*-PHIS under its custody. The PCM process will assist the Collaborative in its on-going effort to make the *i*-PHIS system as responsive as possible to the evolving needs of the public health community.

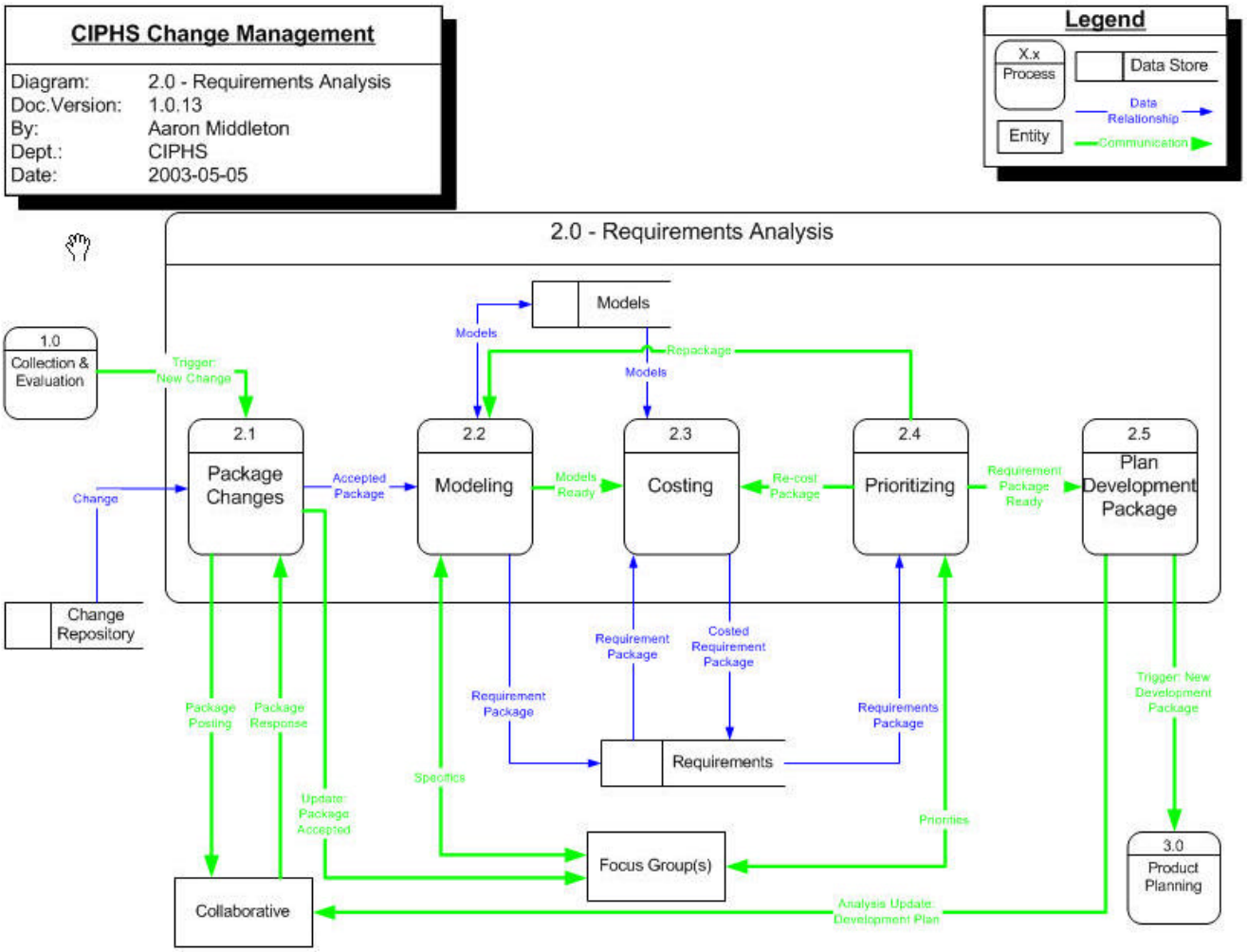
The proposed PCM process model outlined in this document needs to be validated and evaluated after the release of *i*-PHIS version 6.4. The experience of the stakeholders during the current release will provide the necessary input to re-adjust the PCM process to make it fit the needs and requirements of the Collaborative for *i*-PHIS and all the products under its shared mandate.

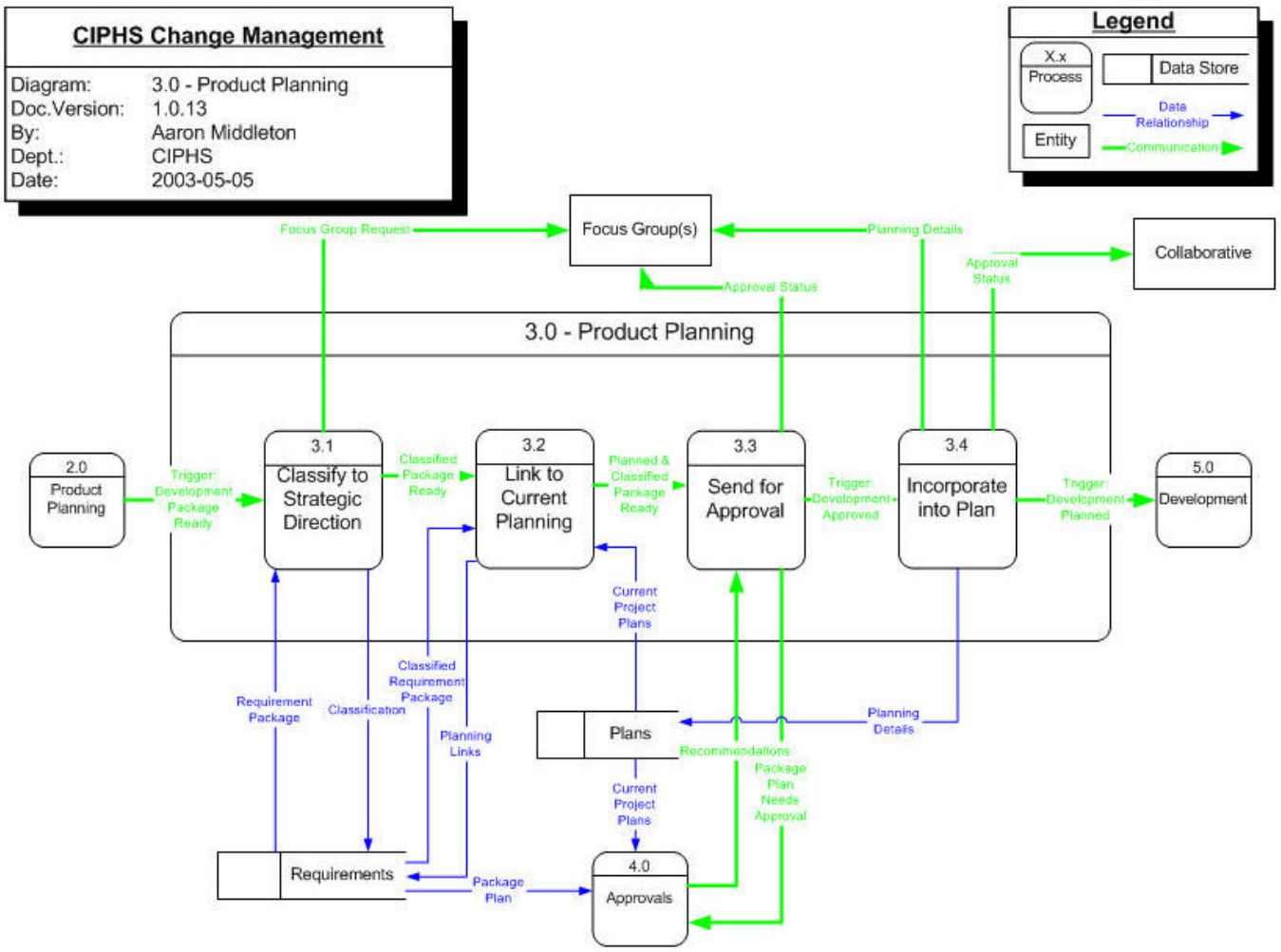
## APPENDIX A

# CIPHS CHANGE MANAGEMENT WORKFLOWS


CIPHS Change Management
Diagram: 0 - Conceptual
Doc.Version: 1.0.13
By: Aaron Middleton
Dept.: CIPHS
Date: 2003-05-05
Legend
X.x Process
Data Store
Data Relationship
Entity
Communication
4.0 Approvals
Models
Collaborative
Test Plans
User(s)
Focus Groups
Request Repository
1.0 Collection & Evaluation
2.0 Requirements Analysis
3.0 Product Planning
5.0 Development
6.0 Testing & QA
CIPHS Release Management
Helpdesk
Change Repository
Requirements Repository
Plan Repository
Models
7.0 Change Management Evaluation

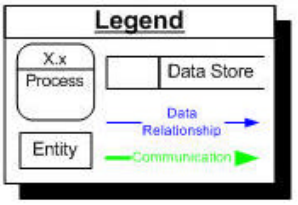

CIPHS Change Management
Diagram: 1.0 - Collection & Evaluation
Doc.Version: 1.0.13
By: Aaron Middleton
Dept.: CIPHS
Date: 2003-05-05
Legend
X.x Process
Data Store
Data Relationship
Entity
Communication
1.0 - Collection & Evaluation
User(s)
Update: Evaluation Complete, Sent for Analysis
Q&A
Request Status
1.1 Decide: Change or Bug
Trigger: Change Request
1.2 Create Change Record
1.3 Establish Motivation
1.4 Establish Scope
1.5 Establish Impact
Request
Request
Request
Helpdesk
Motivation
Trigger: New Change
Change Details
Scope
Fast Track Bugs and Critical Changes
Changes
Impact
Change
2.0 Requirements Analysis
Trigger: New Bug or Critical Change

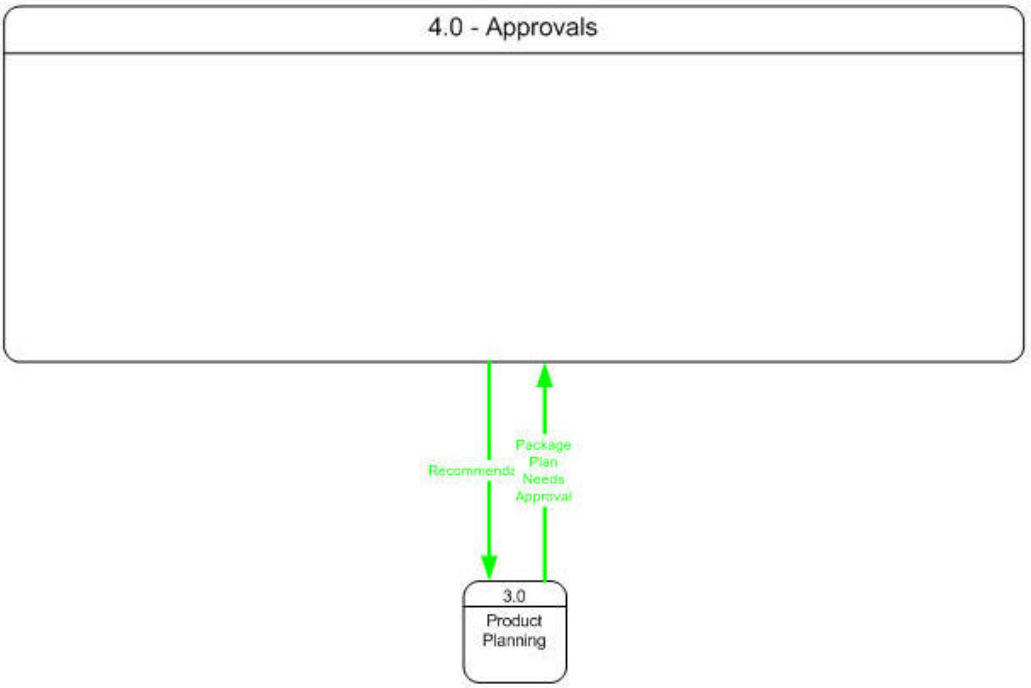

CIPHS Change Management
Diagram: 2.0 - Requirements Analysis
Doc.Version: 1.0.13
By: Aaron Middleton
Dept.: CIPHS
Date: 2003-05-05
Legend
X.x Process
Data Store
Data Relationship
Entity
Communication
2.0 - Requirements Analysis
Models
1.0 Collection & Evaluation
Trigger: New Change
Repackage
2.1 Package Changes
2.2 Modeling
2.3 Costing
2.4 Prioritizing
2.5 Plan Development Package
Accepted Package
Models Ready
Re-cost Package
Requirement Package Ready
Change
Change Repository
Requirement Package
Costed Requirement Package
Requirements
Package Posting
Package Response
Update: Package Accepted
Specifics
Priorities
Trigger: New Development Package
Focus Group(s)
Collaborative
3.0 Product Planning
Analysis Update: Development Plan


CIPHS Change Management
Diagram: 3.0 - Product Planning
Doc.Version: 1.0.13
By: Aaron Middleton
Dept.: CIPHS
Date: 2003-05-05
Legend
X.x Process
Data Store
Data Relationship
Entity
Communication
Focus Group Request
Focus Group(s)
Planning Details
Approval Status
Collaborative
Approval Status
3.0 - Product Planning
2.0 Product Planning
Trigger: Development Package Ready
3.1 Classify to Strategic Direction
Classified Package Ready
3.2 Link to Current Planning
Planned & Classified Package Ready
3.3 Send for Approval
Trigger: Development Approved
3.4 Incorporate into Plan
Trigger: Development Planned
5.0 Development
Current Project Plans
Classified Requirement Package
Requirement Package
Classification
Planning Links
Plans
Planning Details
Recommendations
Package Plan Needs Approval
Current Project Plans
Requirements
Package Plan
4.0 Approvals

**CIPHS Change Management**

| | |
|---|---|
| Diagram: | 4.0 - Approvals |
| Doc.Version: | 1.0.13 |
| By: | Aaron Middleton |
| Dept.: | CIPHS |
| Date: | 2003-05-05 |



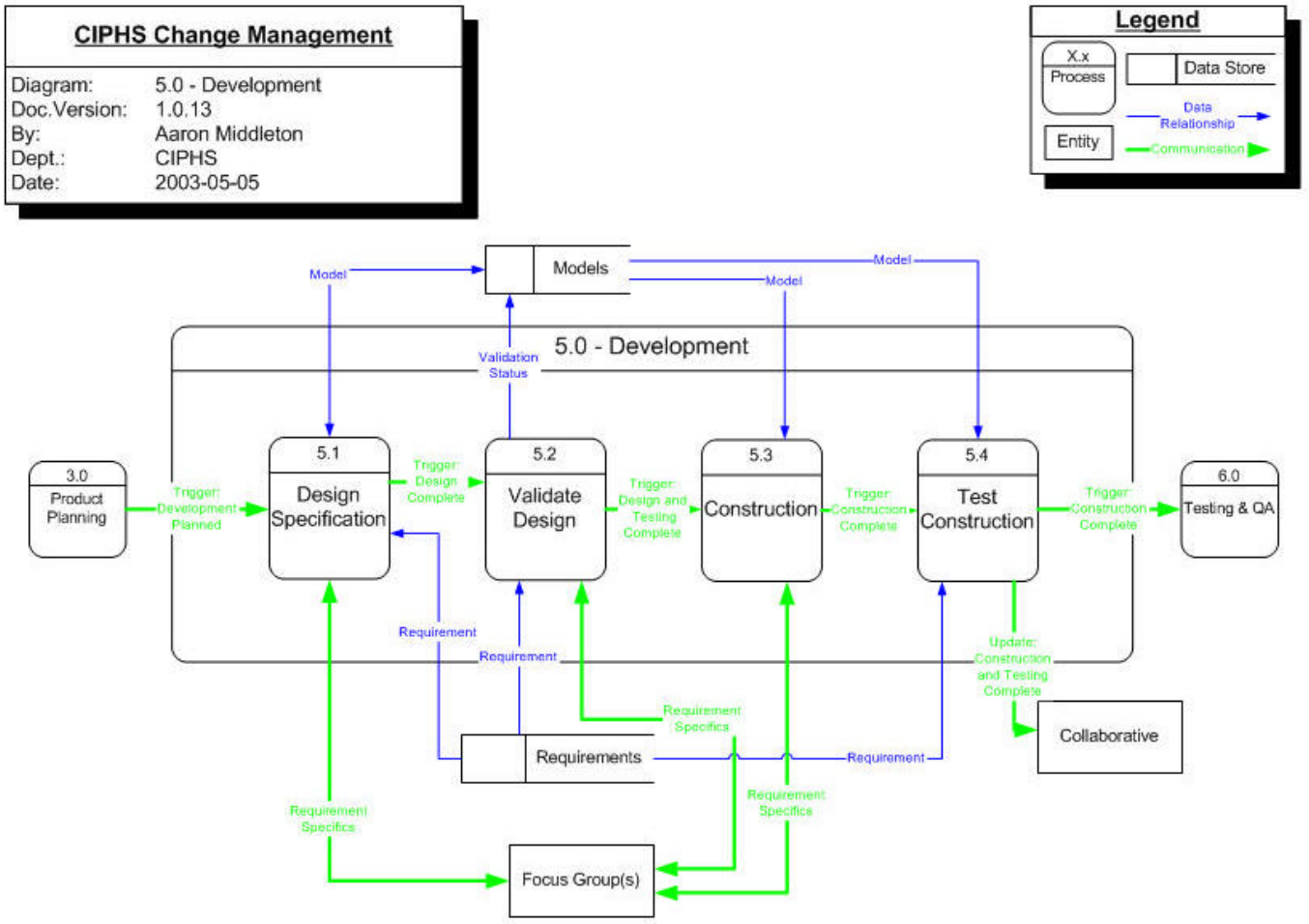

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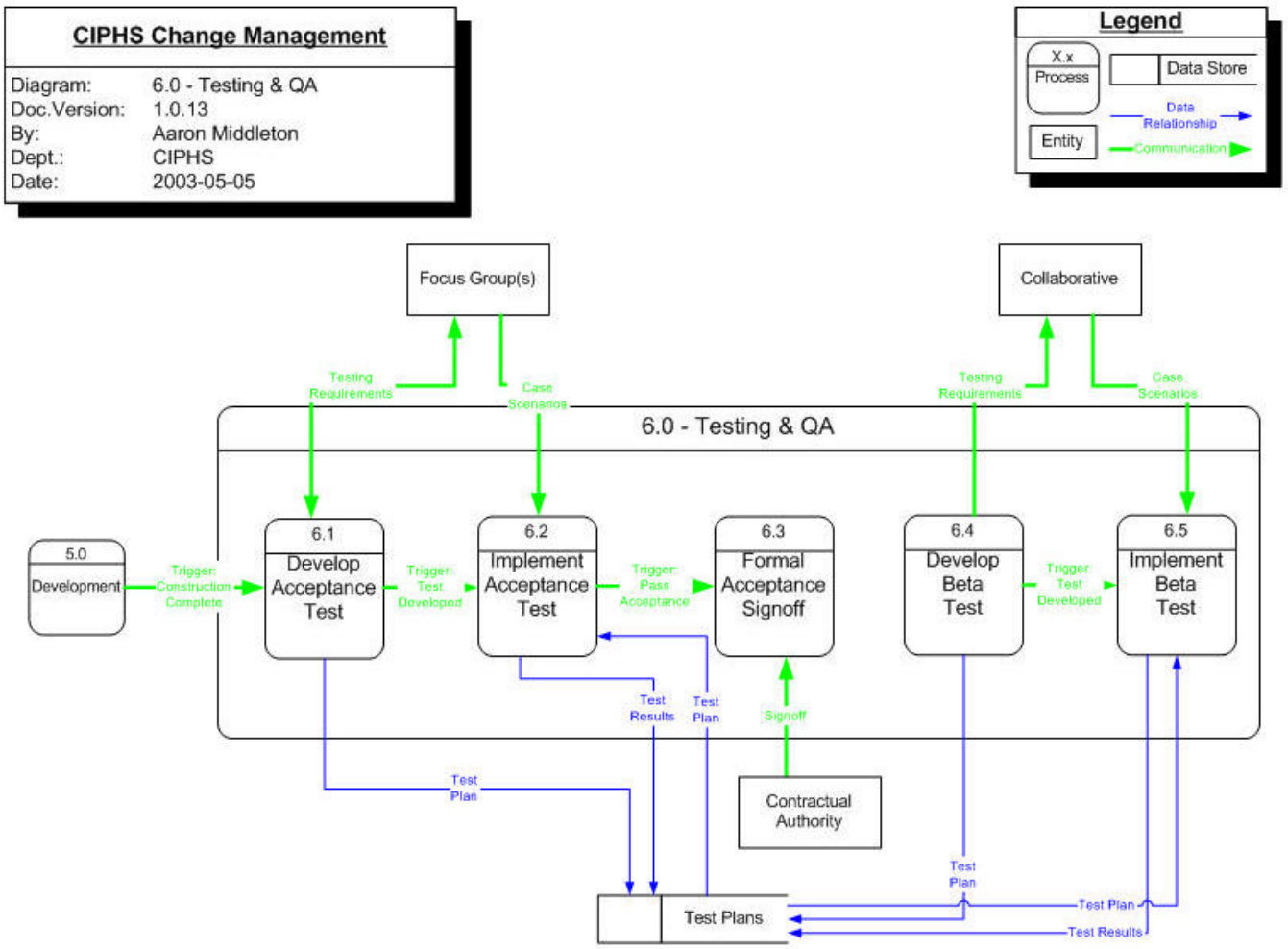
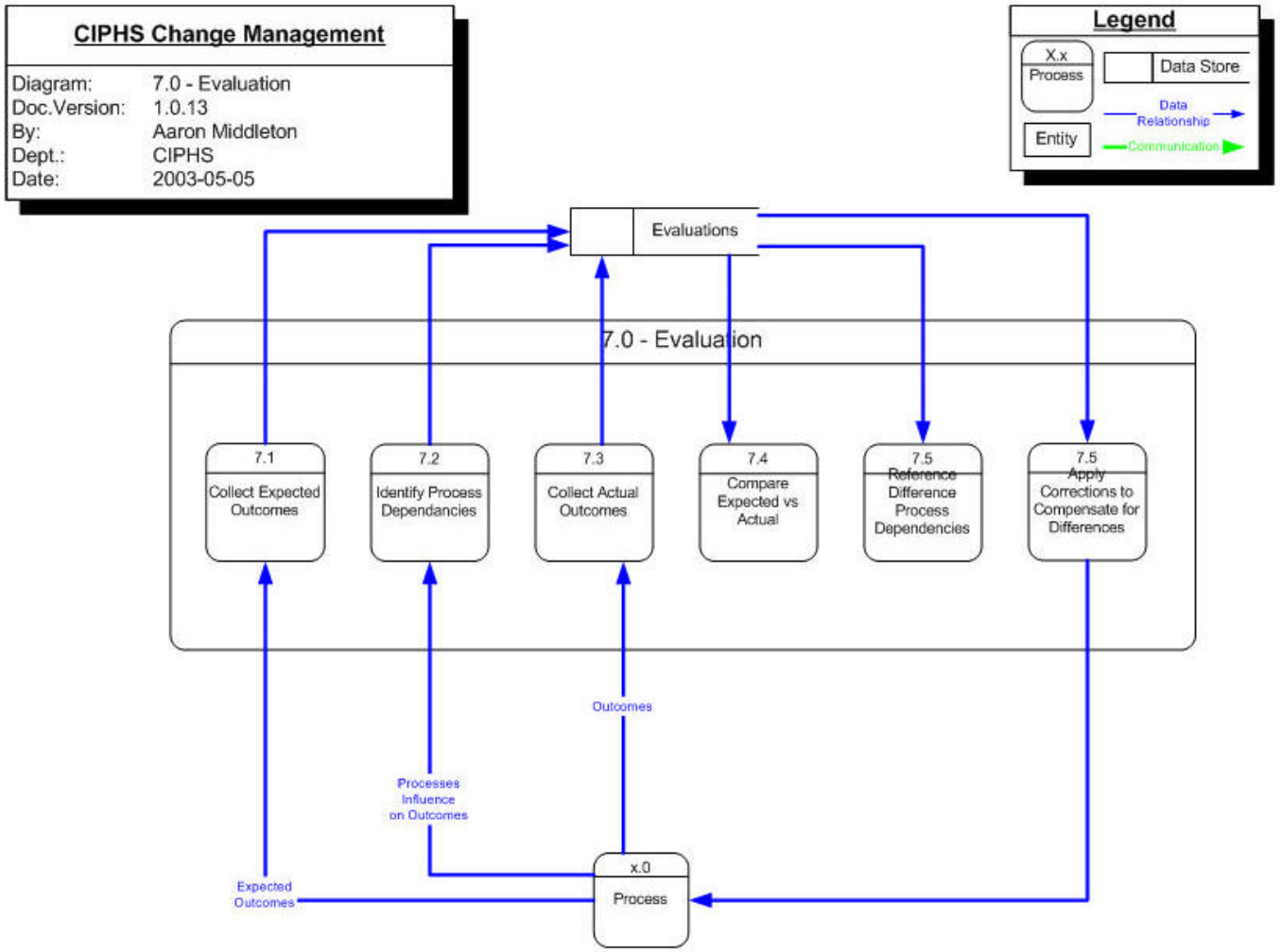
Diagram: 5.0 - Development
Doc.Version: 1.0.13
By: Aaron Middleton
Dept.: CIPHS
Date: 2003-05-05
Legend
X.x Process
Data Store
Data Relationship
Entity
Communication
Models
Model
Model
Model
Validation Status
5.0 - Development
3.0 Product Planning
Trigger: Development Planned
5.1 Design Specification
Trigger: Design Complete
5.2 Validate Design
Trigger: Design and Testing Complete
5.3 Construction
Trigger: Construction Complete
5.4 Test Construction
Trigger: Construction Complete
6.0 Testing & QA
Requirement
Requirement
Update: Construction and Testing Complete
Collaborative
Requirement Specifics
Requirements
Requirement
Requirement Specifics
Requirement Specifics
Focus Group(s)


CIPHS Change Management
Diagram: 6.0 - Testing & QA
Doc.Version: 1.0.13
By: Aaron Middleton
Dept.: CIPHS
Date: 2003-05-05
Legend
X.x
Process
Data Store
Data Relationship
Entity
Communication
Focus Group(s)
Collaborative
Testing Requirements
Case Scenarios
Testing Requirements
Case Scenarios
6.0 - Testing & QA
5.0
Development
Trigger: Construction Complete
6.1
Develop Acceptance Test
Trigger: Test Developed
6.2
Implement Acceptance Test
Trigger: Pass Acceptance
6.3
Formal Acceptance Signoff
6.4
Develop Beta Test
Trigger Test Developed
6.5
Implement Beta Test
Test Results
Test Plan
Signoff
Test Plan
Contractual Authority
Test Plan
Test Plans
Test Plan
Test Results


CIPHS Change Management
Diagram: 7.0 - Evaluation
Doc.Version: 1.0.13
By: Aaron Middleton
Dept.: CIPHS
Date: 2003-05-05
Legend
X.x
Process
Data Store
Data Relationship
Entity
Communication
Evaluations
7.0 - Evaluation
7.1
Collect Expected Outcomes
7.2
Identify Process Dependancies
7.3
Collect Actual Outcomes
7.4
Compare Expected vs Actual
7.5
Reference Difference Process Dependencies
7.5
Apply Corrections to Compensate for Differences
Outcomes
Processes Influence on Outcomes
Expected Outcomes
x.0
Process

## APPENDIX B

# *i*-PHIS CHANGE SUBMISSION FORM


## *i*-PHIS Change Submission

The objective of this form is to provide the Product Management Team with sufficient background information to keep them informed and facilitate decision-making regarding this proposed change.

Agency Name: Province/Jurisdiction:

Date of Submission:

Name: Phone Number:

Email Address: Fax:

What system(s) are you currently using? *i*-PHIS ❑ Version _____
Other ❑ (describe) _____
None ❑

---

1. a) Clearly define your proposed change. (Please ensure to address the criteria such as data, business function etc.)

   b) What are the benefits of the proposed change?

      In your agency/community;

      In your province/territory;

      Nationally;

      Internationally;

   c) What are the implications if the change is not made?

2. Priority of change request: Critical___ High___ Medium___ Low___

3. Please state an estimated cost of development for this change.

| | |
|---|---|
| Unknown | ❑ |
| Under $1,000 | ❑ |
| Between $1,000-10,000 | ❑ |
| Between $10,000-$20,000 | ❑ |
| Over $20,000 | |

4. Please describe any preliminary research or development completed for this proposed change.

5. Please describe the level of support and/or funding you have received or may receive from other jurisdictions on this proposal for change.

6. Please describe your proposed timeframe for development of this change.

7. Additional Comments:

Thank-you!

You will be informed, in writing, as to the status of your proposal by the CIPHS Product Management team.

Please submit this proposal and supporting documentation to:

CIPHS Product Management Office
130 Colonnade Rd.
A/L 6503A
Ottawa, ON
K1A 0K9

Phone: 613-957-6267
Fax: 613-952-3196
E-mail: robert_walker@hc-sc.gc.ca

# APPENDIX C

## 1) PCM View by Outputs

| OUTPUTS | SDLC PHASE | PRIME STAKEHOLDER |
|---|---|---|
| CIPHS Strategic Direction | Phase 1<br>Collection & Evaluation | Council |
| *i*-PHIS Change Submission Forms | Phase 1 | Collaborative<br>Program/IT Advisory Groups<br>Focus Group |
| Rating of CRs | Phase 2<br>Requirements Analysis | Collaborative |
| Requirements Package Plan | Phase 2 | Product Manager |
| Preliminary Product Plan | Phase 3<br>Product Planning | Product Manager |
| Product Plan | Phase 4<br>Approvals | Council |
| Upgraded Product | Phase 5<br>Development | Product Manager |
| Acceptance Test Plan<br>Acceptance Test<br><br>Acceptance Test Plan Summary Report | Phase 6<br>User Testing & QA | Program Advisory Group<br><br><br>Council |
| Beta Test Plan<br>Beta Test<br><br>Beta Test Plan Summary Report | Phase 6 | IT Advisory Group<br>Public Health Community<br><br>Jurisdictional Council |

## 11) PCM View by Stakeholder

### a) By Council

| | | |
|---|---|---|
| **Phase 1** | **Input** | • CRs targeted for fast tracking indicating some urgency |
| | **Output** | • Define the strategic direction for the CIPHS product at the beginning of the PCM process with input from the CIPHS Collaborative<br>• Establish pre-determined threshold criteria that governs what CRs can be routed through the fast track stream |
| **Phase 2** | **Input** | • Recommendations from Subcommittee on CRs that are recommended for fast tracking<br>• Recommendation from Subcommittee on Product Manager's request for permission to exceed fast track criteria thresholds |
| | **Output** | • Provide overall strategic direction for the development of the current Product Development Plan<br>• Approve/reject recommendation to fast track a CR<br>• Approve/reject recommendation to exceed established fast track criteria thresholds<br>• Review and update the fast track criteria thresholds criteria as required |
| **Phase 3** | **Input** | • The preliminary Product Plan and the recommendations of the Subcommittee<br>• The Council's own strategic direction for the release |
| | **Output** | • Approve/reject the recommendations of the Subcommittee on the preliminary Product Development Plan Develop |
| **Phase 4** | **Input** | • Preliminary Product Plan and accompanying recommendations from the Subcommittee |
| | **Output** | • Assess the Plan in terms of:<br>o Addressing the Council's strategic direction<br>o Overall impact of release<br>o Consistent with established CIPHS standards<br>o Costing and funding<br>o Schedule for the Release<br>• Decide on the status of the preliminary Product Plan<br>o Approve Plan as is<br>o Approve Plan subject to the successful resolution of noted issues<br>o Reject Plan due to major deficiencies and direct appropriate revisions |
| **Phase 5** | **Input** | o Status Reports from Product Manager |
| | **Output** | • Assist in the resolution of major issues that may impact the release Plan and schedule<br>• Direct posting of release information on the secure web site so that Collaborative membership are kept informed |

| | | |
|---|---|---|
| **Phase 6** | **Input** | • Status Reports from Product Manager<br>• The Acceptance Test Summary Report<br>• The Beta Test Summary Report |
| | **Output** | • Request Program Advisory Group and the Focus Group to participate in the upcoming Acceptance Test<br>• Request Collaborative to select a Beta site(s) for the Beta Test<br>• Request jurisdiction of the Beta site(s) to identify trainers for the Beta Test<br>• Review the Acceptance Test Summary Report and decide to:<br>o Authorize the Product Manager to proceed with the Beta Test; or<br>o Authorize the Product Manager to proceed with Beta Test subject to satisfactorily meeting certain conditions i.e. repairing reported problems; or<br>o Deny authorization to proceed, at this time, and identify the issues that must be addressed by Product Manager before authorization is granted<br>• Review the Beta Test Summary Report<br>o For information; or<br>o Direct the Product Manager to work with the Beta jurisdiction to resolve technical issues identified during the Beta test |

**b) By Subcommittee**

| | | |
|---|---|---|
| **Phase 1** | **Input** | • Strategic direction for product development as approved by Council<br>• Fast track threshold criteria as defined by Council<br>• *i*-PHIS Change Submission forms forwarded by the Product Manager<br>• CRs targeted for fast tracking |
| | **Output** | • Contribute to defining the strategic direction for product development<br>• Reviews CRs that have been received<br>• Keeps Council informed of any CRs proposed for fast tracking |
| **Phase 2** | **Input** | • Fast tracked CRs recommended by the Product Manager<br>• Request from Product Manager for permission to exceed fast track criteria thresholds |
| | **Output** | • Table a recommendation to Council to approve/reject request to fast track a CR<br>• Table a recommendation to Council to approve request to exceed fast track criteria thresholds |
| **Phase 3** | **Input** | • The preliminary Product Development Plan from the Product Manager<br>• Council's strategic direction guidelines |
| | **Output** | • Reviews the Plan against a set of evaluation criteria that include:<br>o What is the reach of this CR i.e. local, pan-Canadian<br>o What will the impact be on the user community i.e. in terms of new functionality, training<br>o Costing and funding considerations<br>o Alignment to the strategic directions of Council<br>• Provides feedback to the Product Manager and may request a revision to the preliminary Product Development Plan<br>• Prepares a set of recommendations for Council's review<br>• Forwards the preliminary Product Development Plan and their associated recommendations to the Council and requests approval to proceed with Plan |
| **Phase 4** | **Input** | • Request by Council for further input or clarification on their recommendations |
| | **Output** | • Present recommendations and Plan at Council meeting<br>• Work with Product Manager to update Plan if Council:<br>o Approves the Plan subject to modification<br>o Rejects the preliminary Product Plan |
| **Phase 5** | **Input** | |

| | | |
|---|---|---|
| | **Output** | • No active role in this Phase |
| **Phase 6** | **Input** | • No active role in this Phase |
| | **Output** | |

**c) By Product Manager**

| | | |
|---|---|---|
| **Phase 1** | **Input** | • Strategic direction for product development as approved by Council<br>• Fast track threshold criteria as defined by Council<br>• Problems reported to the Help Desk<br>• *i*-PHIS Change Submission forms |
| | **Output** | • Contributes to defining the strategic direction for product development<br>• Reviews *i*-PHIS Change Submission form for completeness and may consult with the sponsor to solicit further information<br>• Creates a Change Request (CR) record<br>• Makes a determination as to whether the CR is critical and needs to be fast tracked or go through the regular stream<br>• Advises Subcommittee of CRs recommended for fast tracking immediately<br>• Directs fast tracked CRs to immediately undergo a preliminary technical impact assessment and costing analysis<br>• Sponsors and submits *i*-PHIS Change Submission forms |
| **Phase 2** | **Input** | • The technical impact assessment and costing analysis for proposed fast tracked CRs<br>• Feedback from the Collaborative on the **regular stream CRs** posted on the secure web site |
| | **Output** | • Prepares justification to Subcommittee for request to proceed with proposed fast tracked CR<br>• Actions decision rendered by Council re: fast tracked CR<br>o If rejected – CR closed or goes through regular stream,<br>o If approved - CR immediately jumps to Phase 5: Development Phase<br>• Prepares a formal request to Subcommittee for permission to exceed fast track criteria thresholds<br>• Posts **regular stream CRs** on the secure web site<br>• Notifies Collaborative membership of target release date and requests they prioritize the CRs posted on secure web site<br>• Prioritizes CRs based on the tabulation of voting results per CR from the Collaborative<br>• Conducts in-depth technical analysis, impact and costing assessments on critical and high priority CRs<br>• Produces a Requirements Package Plan consisting of prioritized and impacted CRs which becomes the key input to Phase 3: Product Planning |
| **Phase 3** | **Input** | • Council's strategic direction guidelines in the determination of priorities for the preliminary Product Development Plan |

| | | |
|---|---|---|
| | **Output** | • Prepares a preliminary Product Development Plan recommending a set of CRs (enhancements and repairs to system bugs) for inclusion in the next release<br>o Maps each CR in the Requirements Package Plan against the Council's strategic direction to establish a priority listing<br>o Reviews existing CRs (enhancements and repairs to system bugs) that are already in the pipeline and maps to Council's strategic direction<br>• Forwards preliminary Product Development Plan to the Subcommittee |
| **Phase 4** | **Input** | • Request by Council for more information or clarification on the detailed contents of the preliminary Product Development Plan |
| | **Output** | • Actions decision by Council<br>o If approved, directs the start of the Phase 5: Development<br>o If approved subject to modification, makes the appropriate revisions and re-submit plan for approval<br>o If rejected, rebuilds the preliminary Product Development Plan based on specific direction received from Council<br>• Posts Council's decision and the approved Product Development Plan and Schedule on the secure web site |
| **Phase 5** | **Input** | o The approved Product Development Plan |
| | **Output** | • Updates work plan and release schedule<br>• Initiates the regular development cycle:<br>o Translates the business CRs into technical requirements<br>o Updates the product Design as impacted by the approved CRs<br>o Constructs new modules and programs and/or enhances/repairs the existing application software<br>o Develops a Integration Test Plan to test the technical integration within and among modules and programs and between system interfaces<br>o Conducts integration testing in the development environment<br>o Documents test results and takes appropriate action if a test fails<br>• Approves migration of tested product application software to the Test environment for the Acceptance Test<br>• Prepares Status Reports for Council<br>• Posts release updates on the secure web site |

| | | |
|---|---|---|
| **Phase 6** | **Input** | • Receives list of Acceptance Test testers<br>• Advised of the Beta site(s)<br>• Receives list of Beta testers<br>• Receives names of the Trainers for the Beta Test<br>• Direction from Council as a result of the Acceptance and Beta tests |
| | **Output** | • Supports the Acceptance and Beta Test efforts:<br>o Sets up the appropriate testing environments for the Acceptance Test<br>o Supports the jurisdictions in setting up their Beta Test environments<br>o Provides orientation to Acceptance and Beta testers on the contents of the new release<br>o Assists in the testing process by<br>▪ Assisting in the documentation of the Acceptance Test Plan and scenarios<br>▪ Assisting in the documentation of the Beta Test Plan and scenarios<br>▪ Providing training on how to test and document test results including problem reports<br>▪ Investigating and validating problem reports documenting test failures<br>▪ Liaising with the technical development team to resolve reported problems and refresh application software for re-validation<br>▪ Liaising with the jurisdictional IT team as required<br>▪ Providing overall logistical support<br>• Validates User documentation<br>• Validates Training documentation for Train the Trainer sessions at the Beta site<br>• Conducts Train the Trainer sessions for the Beta site trainers<br>• Status reporting to Council highlighting any serious issues that may impact the release schedule |

**d) By Collaborative**

| | | |
|---|---|---|
| **Phase 1** | **Input** | • Feedback from their jurisdictional constituency proposing new or enhanced system functionality<br>• Strategic direction for product development as approved by the Council |
| | **Output** | • Contribute to defining the strategic direction for product development<br>• Sponsor and submit *i*-PHIS Change Submission forms<br>• Forward a preliminary *i*-PHIS Change Submission form to the Program Advisory Group and/or a Focus Group to solicit more information and support |
| **Phase 2** | **Input** | • Regular stream CRs posted on the secure web site |
| | **Output** | • Review CRs and provide additional input<br>• Solicit input from the public health community in their jurisdiction as required<br>• Express level of support by checking off the applicable rating box for each CR: critical, high priority, medium priority, low priority |
| **Phase 3** | **Input** | • No role during this Phase |
| | **Output** | |
| **Phase 4** | **Input** | • Approved Product Development Plan and Schedule posted on the secure web site<br>• Applicable jurisdiction advised on Council's directive regarding a bolt-on requirement |
| | **Output** | • No active role during this Phase |
| **Phase 5** | **Input** | • Current release information posted on the secure web site |
| | **Output** | • No active role during this Phase |
| **Phase 6** | **Input** | • Request for input on potential of Beta Test site(s)<br>• Request to identify trainers for the selected Beta Test site(s)<br>• The Beta Test Summary Report |

| | | |
|---|---|---|
| | **Output** | • Provide list of testers and trainers for the Beta test to the Product Manager<br>• Direct jurisdictional IT group to prepare for the technical Beta test and co-ordinate with the IT Advisory Group<br>• Recommends potential Beta site(s) to Council<br>• Review the Beta Test Summary Report and take one of the following three options:<br>o Approval deploy upgraded product to all sites across the jurisdiction<br>o Conditional Approval to deploy subject to the resolution of reported technical problems<br>o Deny approval to deploy with justifying rationale |

**e) By Public Health Community**

| | | |
|---|---|---|
| **Phase 1** | **Input** | • General news as posted on the CIPHS web site<br>• The Help Desk will log a reported problem and respond to a user in two ways:<br>o Confirm the existence of a system defect or bug back to the user and suggest a work-around if possible; or<br>o Advise the user that the reported problem is not a system defect but rather an identification of new system functionality<br>• Recommend that the user contact their Collaborative representative for further action |
| | **Output** | • Report system problems to the Help Desk<br>• Identify new or enhanced functionality to their jurisdictional Collaborative representative who may sponsor and submit an *i*-PHIS Change Submission form |
| **Phase 2** | **Input** | • The jurisdictional Collaborative representative may consult with their public health community on a specific CR that has been posted on the secure web site |
| | **Output** | • Provide input as requested that is consolidated into a response through their jurisdictional Collaborative representative |
| **Phase 3** | **Input**<br>**Output** | • No role during this Phase |
| **Phase 4** | **Input**<br>**Output** | • No role during this Phase |
| **Phase 5** | **Input**<br>**Output** | • No role during this Phase |
| **Phase 6** | **Input** | • Request to become the Beta site(s) testers by jurisdictional Collaborative representative |
| | **Output** | Beta Site(s)<br>• Assist in the development of the Beta Test Plan and scenarios<br>• Conduct tests to validate that the system (including interfaces to other systems and databases) functions properly<br>• Document test results<br>• Document problem reports<br>• Provide input to the Beta Test Summary Report |

**f) By Program/IT Advisory Group**

| | | |
|---|---|---|
| **Phase 1** | **Input** | • Draft *i*-PHIS Change Submission forms from other stakeholders<br>• Strategic direction for product development as approved by Council<br>• Request for input on proposed fast tracked CRs |
| | **Output** | • Contribute to defining the strategic direction for product development<br>• Sponsor and submit an *i*-PHIS Change Submission form<br>• Respond to requests for input to proposed *i*-PHIS Change Submission forms<br>• Provide feedback on proposed fast tracked CRs if requested |
| **Phase 2** | **Input** | • Regular stream CRs posted on the secure web site<br>• Receive request from the Product Manager to provide additional input on a specific a CR |
| | **Output** | • Provide further business input from a expert perspective in public health and case management to a specific CR<br>• Provide further technical input as required<br>• Respond to Product Manager as requested |
| **Phase 3** | **Input** | • Request from Subcommittee and /or Product Manager for additional input on specific CRs included in the preliminary Product Plan |
| | **Output** | • Provide feedback as requested |
| **Phase 4** | **Input** | • Request from Council for additional input and/or clarification on a specific CRs included in the preliminary Product Plan<br>• Approved Product Development Plan and Schedule posted on the secure web site |
| | **Output** | • Provide feedback as requested |
| **Phase 5** | **Input** | • Current release information posted on the secure web site<br>• Request from Product Manager for additional input on specific CRs to ensure the technical specification have properly interpreted the business requirements |
| | **Output** | • Provide feedback as requested |
| **Phase 6** | **Input** | • Request to participate in the Acceptance Test and Beta Test<br>• Integration Test results in preparation for the Acceptance Test |

| | | |
|---|---|---|
| | **Output** | • Participate in the Acceptance Test (Program Advisory Group)<br>• Develop the Acceptance Test Plan and scenarios<br>• Conduct tests to validate that the CRs and bug repairs have been successfully programmed in the updated *i*-PHIS application software<br>• Document Test results<br>• Document problem reports<br>• Prepare an Acceptance Test Summary Report and recommend that Council authorize the:<br>o Approval to proceed to the Beta Test<br>o Conditional Approval to proceed to the Beta Test subject to the resolution of reported problems<br>o Deny approval to proceed with justifying rationale<br>• Participate in the Beta Test (IT Advisory Group)<br>• Co-ordinate with the jurisdictional IT group:<br>o Develop a technical integration test plan<br>o Conduct tests to validate the technical integration of the upgraded product in the jurisdiction's technical environment<br>o Document Test results<br>o Document problem reports<br>• Prepare a jurisdictional Beta Test Summary Report with recommendations |

**g) Focus Group**

| | | |
|---|---|---|
| **Phase 1** | **Input** | • Draft *i*-PHIS Change Submission forms from other stakeholder<br>• Strategic direction for product development as approved by Council |
| | **Output** | • Contribute to defining the strategic direction for product development<br>• Sponsor and submit an *i*-PHIS Change Submission form<br>• Respond to requests for input to proposed *i*-PHIS Change Submission forms |
| **Phase 2** | **Input** | • Regular stream CRs posted on the secure web site<br>• May receive a request from the Product Manager to provide additional input on a specific a CR |
| | **Output** | • Provide any further input to a CR from their specialized program or technical perspective<br>• Respond to Product Manager as requested |
| **Phase 3** | **Input** | • Request from Subcommittee and /or Product Manager for additional input on specific CRs included in the preliminary Product Plan |
| | **Output** | • Provide feedback as request |
| **Phase 4** | **Input** | • Request from Council for additional input and/or clarification on a specific CRs included in the preliminary Product Plan<br>• Approved Product Development Plan and Schedule posted on the secure web site |
| | **Output** | • Provide feedback as request |
| **Phase 5** | **Input** | • Current release information posted on the secure web site<br>• Request from Product Manager for additional input on specific CRs to ensure the technical specification have properly interpreted the business requirements |
| | **Output** | • Provide feedback as request |
| **Phase 6** | **Input** | • Requested to participate in the Acceptance Test and/or Beta Test<br>• Integration Test results in preparation for the Acceptance Test |

| | | |
|---|---|---|
| | **Output** | • Participate in the Acceptance Test and/or Beta Test<br>• Develop the Acceptance/Beta Test Plan and scenarios<br>• Conduct tests to validate that the CRs and bug repairs have been successfully programmed in the updated *i*-PHIS application software<br>• Conduct tests to validate the technical environment of the upgraded product especially if technical changes are part of the release<br>• Document test results<br>• Document problem reports<br>• Provide input to the Program Advisory Group preparing the final Acceptance Test Summary Report with recommendations to Council<br>• Provide input to the IT Advisory Group preparing the final Beta Test Summary Report |

## APPENDIX D

# GLOSSARY

**Application Software:** The modules and programs that are programmed to deliver a business service. *i*-PHIS is an example of an application software that provides the public health community with a case management tool among other functionality.

**System:** A system is an umbrella term to describe all the hardware, software and network components required to deliver of an automated service to a customer; for example, the application software, the telecommunication network, the hardware such as servers and PCs, other software such as reporting tools. In this context, a reference to the *i*-PHIS system includes interfaces to other systems such as Pharmacy systems, Registry databases.

**Release:** A controlled modification to the application software. In this context, release version 6.4 consists of a set of changes (bug repairs, enhancements to existing functionality or the introduction of new functionality) to the *i*-PHIS application software.

**CIPHS Executive Council (Council):**
The Executive Council is a governing body of the CIPHS Collaborative, and is responsible for setting the strategic direction of the CIPHS Collaborative, through ongoing governance and policy development. Executive Council members represent their jurisdictions through communication and feedback mechanisms, and through decision-making processes at the EC monthly meetings. The membership of the Executive Council is comprised of twelve members from the Collaborative whose jurisdiction has supported the project, and represents a balance of roles represented in the Collaborative and will be from a cross-section of jurisdictions.

**CIPHS EC Change Management Subcommittee (Subcommittee):**
A committee comprised of CIPHS program staff, program advisory, and Collaborative representatives that are responsible for guiding the process of change management. The committee meets as required in order to review and discuss change requests and to facilitate transparent, equitable and timely responses to product change requests.

**CIPHS Product Manager (Product Manager):**
The Product Manager is responsible for managing the CIPHS Product Development Team who is responsible for the successful delivery of the upgraded *i*-PHIS application software to the CIPHS Collaborative membership. For every release, they are responsible for planning, development and testing. The Product Manager works in close co-operation with the Subcommittee and the Council.

**CIPHS Collaborative (Collaborative):**
The CIPHS Collaborative is a diverse group of Federal, Provincial and Territorial partners including public health officials, information technology professionals, and managers. The CIPHS Collaborative is pioneering governance and management of shared F/P/T public health applications. It provides a forum where best practices and new ideas are being advanced for the development of improved public health services for Canadians

**Public Health Community:**
Provinces and Territories are divided into Regional Health Authorities, or Health Units. They are responsible for providing public health services to their community, and are staffed by health care providers and management professionals. They are accountable to the community they serve, and to their individual ministries of health who fund them.

***i*-PHIS Program/IT Advisory Group (Program/IT Advisory Group)[12]:**
The Program side of this Advisory Group is comprised of representatives from the following groups: CIPHS, Health Canada, *i*-PHIS users, Communicable Disease Surveillance Standards Working Group and the Centre for Surveillance Coordination, Health Canada.

Mandate:
To provide CIPHS and the CIPHS Collaborative with ongoing and timely advice relating to *i*-PHIS in order to continue to advance its usefulness as a case management and health surveillance tool for the spectrum of public health programs.

To perform its mandate, the *i*-PHIS Program Advisory Group will:

- Advise/make recommendations on public health, epidemiology, and surveillance issues related to *i*-PHIS.
- Participate in CIPHS Change Management focus groups for *i*-PHIS (standing and ad hoc) to prioritize change requests for development, to identify requirements associated with change requests for the application submitted to the CIPHS Product Manager, and to test changes to the application in advance of new releases of *i*-PHIS
- Create Focus Groups to examine an issue in more detail and issue a report on their analysis and recommendations

On the technical side, the IT Advisory Group is comprised of a representative group of F/P/T technical professionals who will advise the CIPHS Collaborative on technical and architectural matters pertaining to the future technical development of the product. A significant level of collaboration is required as there is no common technical environment among the jurisdictions.

[12] Excerpt taken from the *i*-PHIS Program Advisory Group, Draft Terms of Reference, March 2003

***i*-PHIS Standing Focus Group (Focus Group)[13]:**
A subset of the Program Advisory Group who will report back to the program advisory group on specific issues.

Mandate:
To provide the *i-PHIS Program/IT Advisory Group*, CIPHS and the CIPHS Collaborative with ongoing and timely advice relating to the current and future development of *i*-PHIS to ensure that basic epidemiology, surveillance, and case management needs are met by the application.

To perform its mandate, the *i*-PHIS Standing Focus Group will:

- Review and prioritize, as appropriate, submitted *i*-PHIS change requests, based on their epidemiological, surveillance, and case management merits and the strategic directives established by the CIPHS Collaborative, and report its recommendations to the Epidemiologist for the Public Health Information System in CIPHS.
- Work with the CIPHS Change Management team, as appropriate, to identify requirements associated with changes/enhancements to be made to *i*-PHIS in a given release cycle.
- Participate in user acceptance testing, as appropriate, to evaluate changes/enhancements to the application for a given release.

[13] Excerpt taken from the i-PHIS Standing Focus Group, Draft Terms of Reference, January 2003