Section C

Documenting Business Processes in Public Health
“We hope to develop a shared understanding of public health work and identify areas of commonality among public health agencies,” said Dave Ross, Sc.D., director of the Common Ground National Program Office at the Public Health Informatics Institute. “The Common Ground program offers public health agencies the opportunity to collaboratively develop requirements for more effective information systems and better data exchange.”

Common Grounds Project

- Cabarrus Health Alliance
  - *Common Ground: EMR/Practice Management Evaluation Project Results*
  - [http://www.cabarrushealth.org/commonground/](http://www.cabarrushealth.org/commonground/)
Common Grounds Project

Business Process Matrix

- Process name
- Goals
- Objectives
- Business rules
- Triggers
- Task set
- Input
- Output
- Outcome

Business processes

Public health guidelines

Clinical guidelines
Business Process Matrix
For Public Health

Basic Development Quick Reference

The Business Process Matrix depicts the components that illustrate a business process by labeling the following characteristics...

- Process Name
- Goal
- Objective
- Business Rules
- Trigger(s)
- Task Set
- Input(s)
- Output(s)
- Outcome(s)

Business Process Matrix Definitions

Listed below are the definitions for each of the categories (components) to be defined in a Business Process Matrix...

1. Process Name – the title given to a business process.
2. Goal - explains how the business process supports one or more of the directions of the public health organization.
3. Objective - a concrete statement describing what the business process is trying to achieve in support of this goal. SMART law: Specific, Measurable, Attainable, Realistic, Time bound.
4. Business Rule - a set of criteria that defines or constrains some aspect of the business process.
5. Trigger - an event, action or state that initiates the first course of action in a business process.
6. Task Set - the 5-7 key activities that are carried out in a business process.
7. Input - information or tangible items needed for the business process.
8. Output - information or tangible items produced by the business process.
9. Outcome – the resulting output that indicates the Objective has been met.

Creating a Business Process Matrix

A Business Process Matrix takes time and careful thought about the process components.

1. Decide the PROCESS to work with.
2. Determine the GOAL of the business process.
3. Determine the OBJECTIVE of the business process. Objectives are clear and concise.
4. Identify the OUTCOME to the business process. This is determining which action or transaction in the business process satisfies the objective and completes a cycle of the process.
5. Determine the TRIGGER(s) that initiate the business process. Triggers are typically actions that initiate the set of subsequent activities.
6. Identify all the BUSINESS RULES that guide the process. Business Rules are typically policies, procedures, organizational standards or legal requirements.
7. Determine the 5-7 key activities that make up the body of the process, called the TASK SET. The Task Set is high-level, yet is called out like other process activities.
8. Determine all of the needed information or items needed to perform the process, called INPUTS.

9. Determine all of the produced OUTPUTS. Outputs are information or tangible items, like inputs.
10. Be Clear, Concise and Consistent – ensure that the level of detail and format are at the same level across the diagram. This will help the readers to easily comprehend the Context Diagram.

Business Process Matrix Samples

Component examples for the Business Process Matrix of Food Ordering for Sally’s Lunch Stop:

Process Name: Food Ordering
Goal: Timely provision of food and service to the customer at the best value.
Objective: Accurately process food order for and receive payment from drive-through customers in a minimal amount of time.
Outcome: Distribute order to customer accurately and timely.

Trigger: Customer arrives at drive-through station.
Business Rules: FDA standards for handling food, Cashier does not handle unwrapped food, Cashier greets customer at pickup window, etc.

<table>
<thead>
<tr>
<th>Process Name</th>
<th>Goal</th>
<th>Objective</th>
<th>Business Rules</th>
<th>Trigger(s)</th>
<th>Task Set</th>
<th>Inputs</th>
<th>Outputs</th>
<th>(Measureable) Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Ordering</td>
<td></td>
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</tr>
</tbody>
</table>

Food Ordering:

- Food and beverage inventory
- Inventory of paper goods (bags, straws, napkins)
- Payment, order receipt
- Packaged order

Distribute order to customer accurately and timely.

Source: Public Health Informatics Institute. Permission pending.
Use case scenarios were developed to guide vendors in demonstrating their products to ensure the most important features and functionality were viewed by the project team.

- Use Case: Child Health
- Use Case: Family Planning
- Use Case: Maternal Care Coordination
- Use Case: Maternal Health
- Use Case: Sexually Transmitted Disease
- Use Case: Tuberculosis

Source: http://www.cabarrushealth.org/CommonGround/Methodology/index.htm
Communicable Disease (CD) BP #1 – Immunization Visit – Context Diagram - 1/15/2009

Triggers:
* Referral
  * Client walk-in
  * Appointment

Registrar
- Encounter form
- Registration information
- Medical history and assess immunization needs

Client
- Update immunization record (manual)
- Interpreter

Nurse
- Follow-up appointment & recommendations
- Immunization consent/declination
- Vaccine Information Statement (VIS) and education
- Updated immunization record
- Immunization

NCIR
- Updated immunization record
- Previous medical information (also to Nurse)

Client Management System
- Updated immunization record (automatically)

Medical Record
- Updated immunization record

Notes:
- Interpreter may or may not be needed.

Final Recommendation
The Core Processes & EHR Requirements of Public Health Syndromic Surveillance

The International Society for Disease Surveillance
Meaningful Use Workgroup
Business Process 1 (BP1): Conduct Syndrome-Based Population Health Monitoring