NYeC
NEW YORK eHEALTH COLLABORATIVE

IPRO
Improving Healthcare for the Common Good®

Health Home Implementation Series: Optimizing Practice Workflow

7 March 2012

Presenters:
Jaclyn Brinson, NYeC
Dr. Alan Silver, IPRO

Agenda

- Review objectives and background on the HH project
  - State Medicaid Health Home Patient Flow
  - Care transitions and Health Information Exchange
- Goals of Workflow Redesign
  - Review step-by-step process
  - How to apply the PDSA model
- Example: Consent Management
- Example: Referral Workflow

Objective

This training session will provide introductory guidance and best practices to participants on how to engage clinicians and office staff in workflow redesign when adopting health information technology.

The tools referenced in this session provide a framework to support the documentation of current workflows, identification of staff roles and responsibilities and how to think about the changes technology will introduce in to the day-to-day activities of a practice.

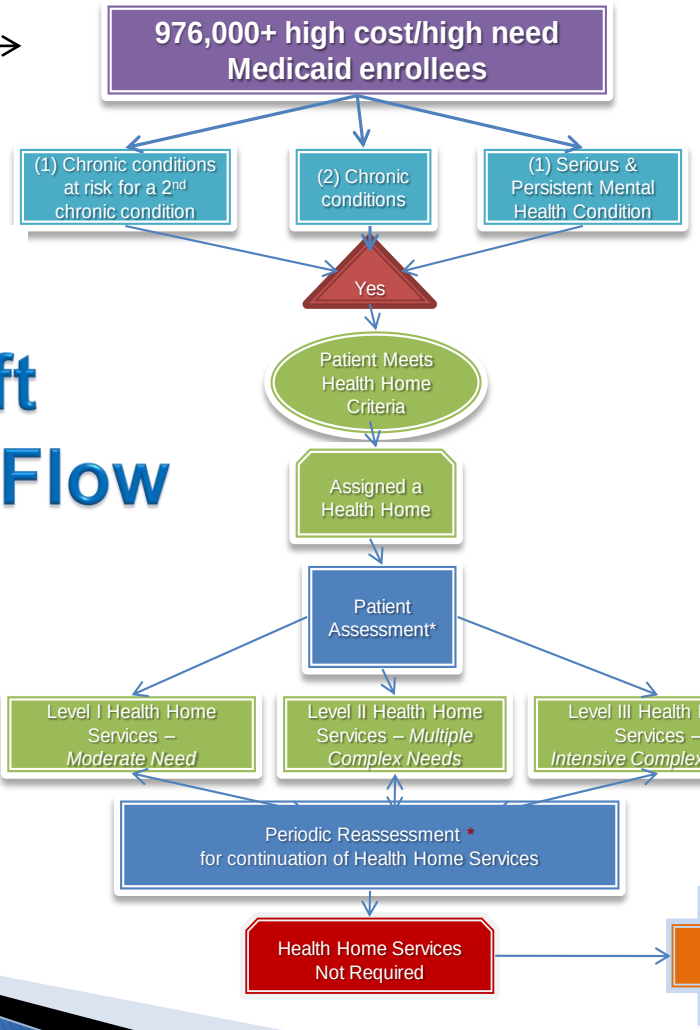
The materials presented benchmark from the well documented experiences in the primary care and hospital setting and will be extrapolated to non-traditional workflow optimization processes care coordinators should consider

Context- New York State Medicaid Health Homes

1. Developmental Disability
2. Behavioral Health
3. Long-Term Care
4. Chronic Medical

NYSDOH Medicaid Health Home State Plan Amendment and Provider Application*

Draft Patient Flow



***Medically and Behaviorally Complex**

***Non-Compliant with Treatment Health Literacy Issues**

***ADL Status**

***Inability to Navigate Health Care System**

***Social Barriers to Care**

***Homelessness**

***Temporary Housing**

***Lack of Family or Support System Food , Income**

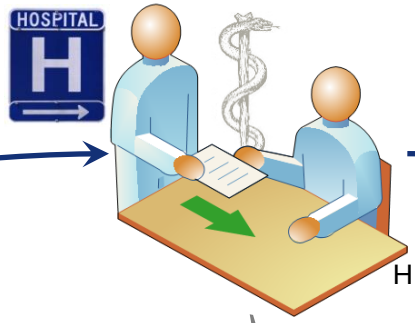
***Need assistance applying for Entitlement Programs**

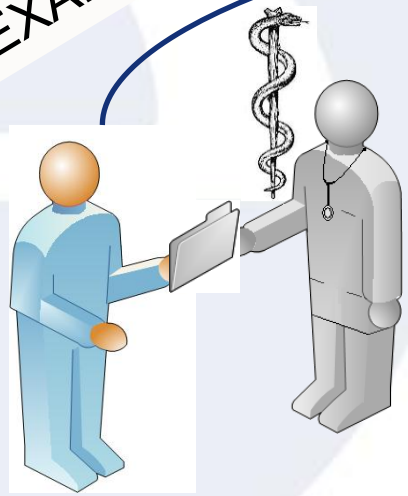
*NYSDOH Medicaid Health Homes
http://www.health.ny.gov/health_care/medicaid/program/medicaid_health_homes

Care Transitions & Health Information Exchange

EXAMPLE

Provider refers patient to a specialist, hospital or other provider for consultation or service



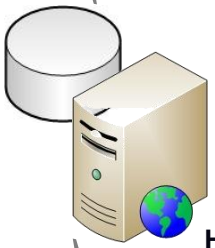


Patient visits PCP or specialist and establishes trusted relationship and consents for release of data; consents and provider routing preferences are sent to HIE service

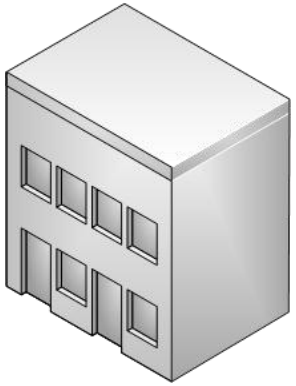
Participant Directory / Consents / Disclosure Log

HIE service submits referral authorization request to payer for approval and referral #

HIE service routes visit summary to PCP, specialist or other interested and trusted party (e.g., health insurance case manager). HIE log can store summary or link to allow for tracking and later lookup.

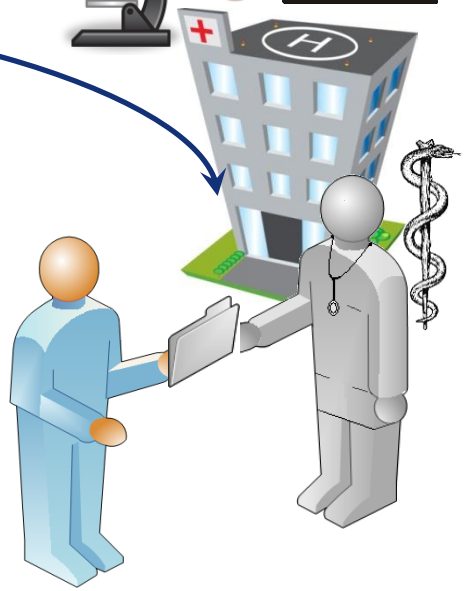


HIE Service



HIE service checks participant directory for routing instructions and sends referral request with pertinent patient information / history, diagnosis and service requested to consulting provider; business rules can be stored in HIE service for elements of real-time decision support

Standard format visit summary with consultation notes transmitted to HIE network.



Patient visits consulting provider, receives services, and details are noted in patient chart , electronic medical record or other result is created (e.g., at lab)

STATE OF NEW YORK DEPARTMENT OF HEALTH

Health Home HIT Needs Assessment Meeting
March 15, 2012 – Roosevelt Hotel, New York City
10am – 3 pm

Join stakeholders including Medicaid, DOH, RHIOs, Health Home participants, Health Plans and NYeC to gather clinical requirements on the key IT issues of Health Homes.

Meeting Agenda

10:00 - 10:10 am	**Welcome**	Carol Raphael
10:10 - 10:30 am	**Opening Remarks**	Greg Allen
10:30 - 10:50 am	**Partnering for Success: NYeC & Health Homes**	Dave Whitlinger

- ✓ Who We Are
- ✓ SHIN-NY 2.0
- ✓ Challenges and Opportunities for Health Homes
  - API
  - Innovation Accelerator Program
  - Timelines

10:50 - 11:00 am	**Leveraging IT Solutions in Health Home Implementation**	Grace Moon

- ✓ Identifying HH IT Needs: Expert Panel
- ✓ Four Priority Focus Areas
- ✓ What was learned: Panel Discussions

11:00 - 11:50 am **Discussion: Care Plan Management**

Facilitators: David Cohen, MD and Roberto Martinez, MD

- ✓ Background and Key Challenges
- ✓ Framework for Development of Common Care Plan for HH:
  - Discussion

11:50am - 12:00 pm **Break**

12:00 - 12:50 pm **Discussion: Patient Engagement**

1

Facilitators: Eli Camhi and Irene Kaufman

- ✓ Background and Key Challenges
- ✓ Framework for Development of Patient Engagement Tools
  - Discussion

12:50 - 2:00 pm **Working Lunch: Table Rounds**

Discussion: Analytics (8 Lunch Round Tables)

Facilitators: Expert Panel Members/NYeC Staff

Discussion: Provider Alerts (8 Lunch Round Tables)

Facilitators: Expert Panel Members/NYeC Staff

2:00 - 2:40 pm **Lunch Table Discussion Report Outs**

Facilitators: Tom Moore and Tom Check

- ✓ Recommendations on solutions for Analytics
- ✓ Recommendations on solutions for Provider Alerts

2:40 - 2:50 pm	**Closing Remarks**	Rachel Block
2:50 - 3:00 pm	**Next Steps**	Grace Moon and Anuj Desai

- ✓ Requirements/Use Case Work Groups
- ✓ April 17, 2012 Meeting

More information is available at:

http://www.health.ny.gov/health_care/medicaid/program/medicaid_health_homes/2012-03-15_health_it_needs_assessment_meeting.htm

http://www.nyehealth.org/index.php/events/health-home-applicants-and-partners

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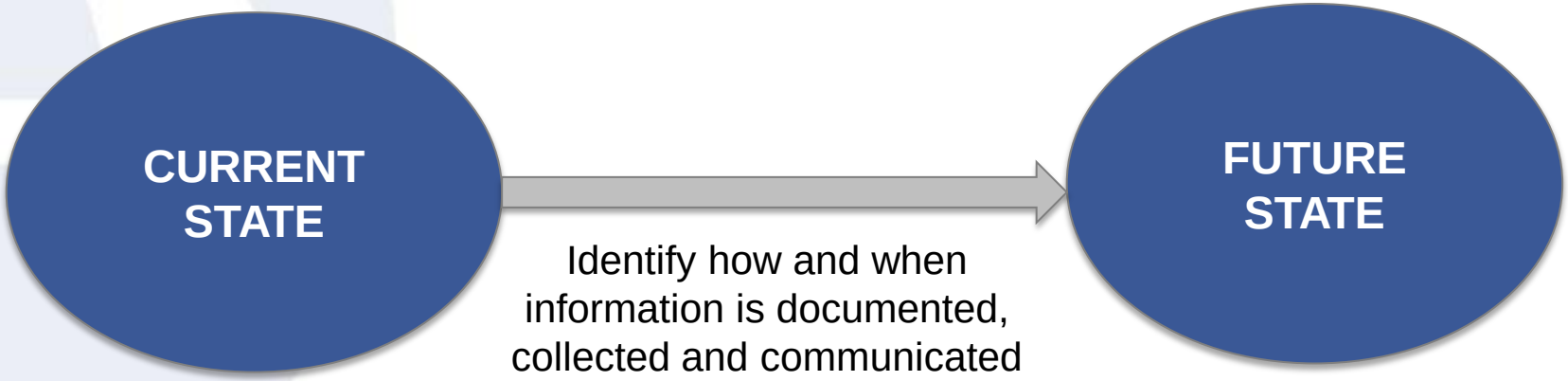
  - How to apply the PDSA model
- Example: Consent Management
- Example: Referral Workflow

Goals of Workflow Analysis

Workflow analysis is an activity that engages all stakeholders in a process to review the ways in which work is done so that critical process steps are translated efficiently into the future process and waste is eliminated.



Identify how and when information is documented, collected and communicated

Identify the players involved in the process and resistant staff

Visualize how technology can and does support or inhibit the process

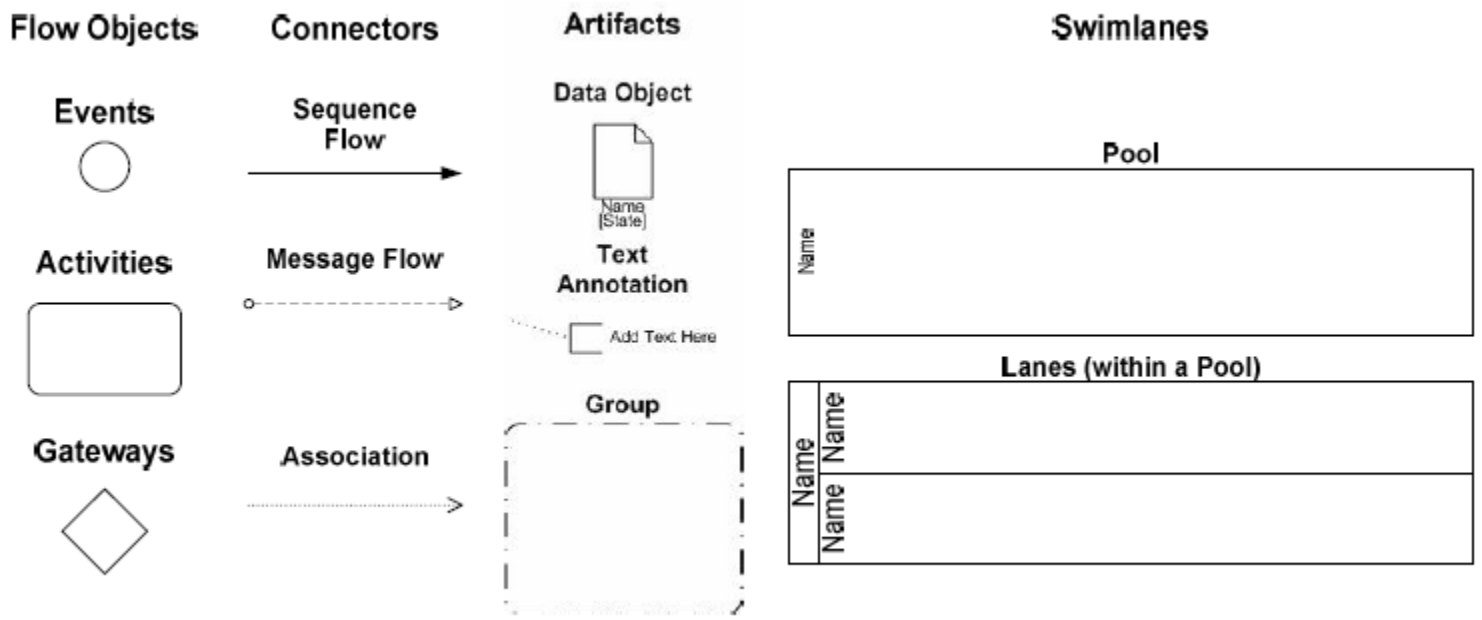
Identify redundancy, gaps and complexities

Process Modeling?

- Ordered sequences of activities and supporting information- describes how an organization achieves its objective
- Process Modeling:
  - **Describes**
    - Tracks what actually happens during a process
    - Reflects an objective point of view to determine if improvements may need to be made or if the process can be more efficient or effective
  - **Prescribes**
    - Defines a desired process and how it can be performed
    - Provides guidance on to complete a task in the desired way
  - **Explain**
    - Links process and requirements the model must fulfill
    - Provides explanation about the rationale of the process

Colette Rolland and Pernici, C. Thanos (1998). *A Comprehensive View of Process Engineering. Proceedings of the 10th International Conference CAiSE'98*. B. Lecture Notes in Computer Science 1413. Springer.

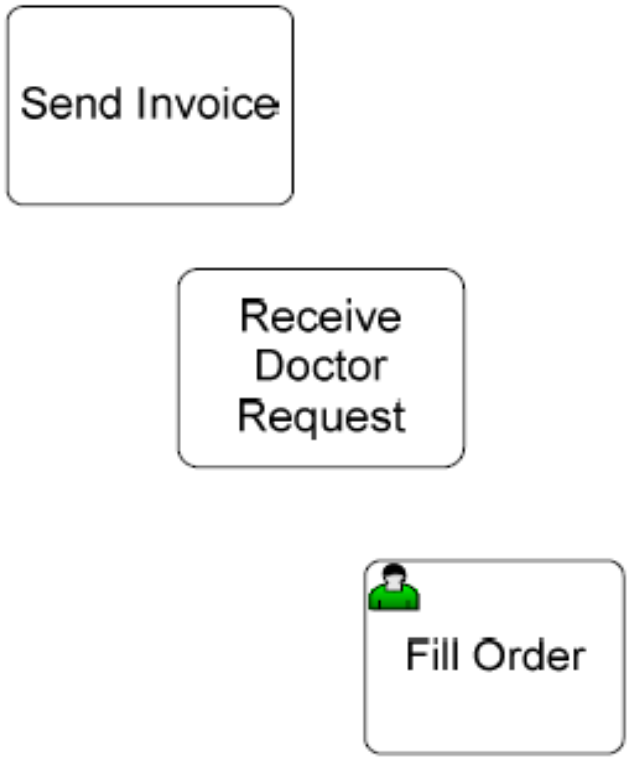
Diagram Elements



http://www.bestuurszaken.be/sites/bz.vlaanderen.be/files/documenten/organisatieontwikkeling/procesmanagement/20061116_OMG_BPMN_Tutorial.pdf

Tasks

- A Task is an atomic activity that is included within a Process. A Task is used when the work in the Process is not broken down to a finer level of Process Model detail
- There are specialized types of Tasks for sending and receiving, or user-based Tasks, etc.
- Markers or icons can be added to Tasks to help identify the type of Task



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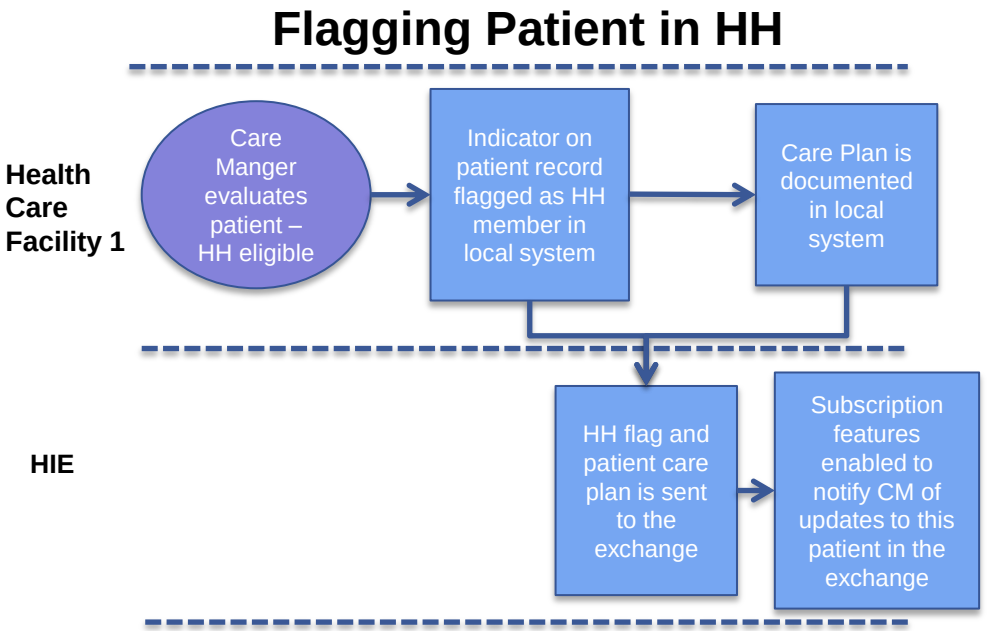
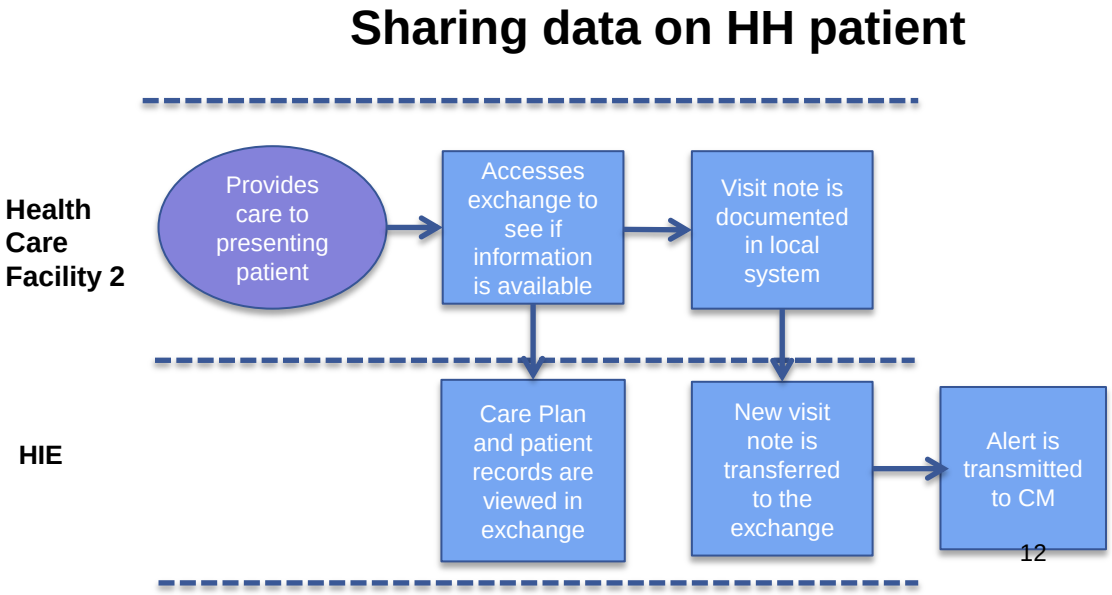
Future Process Flow Diagram Example

An effective process document:

- Identifies key players in process
- Tracks the flow of information
- Identifies key hand-offs between systems and people
- Identifies how technology can support the process

How do we document our processes?





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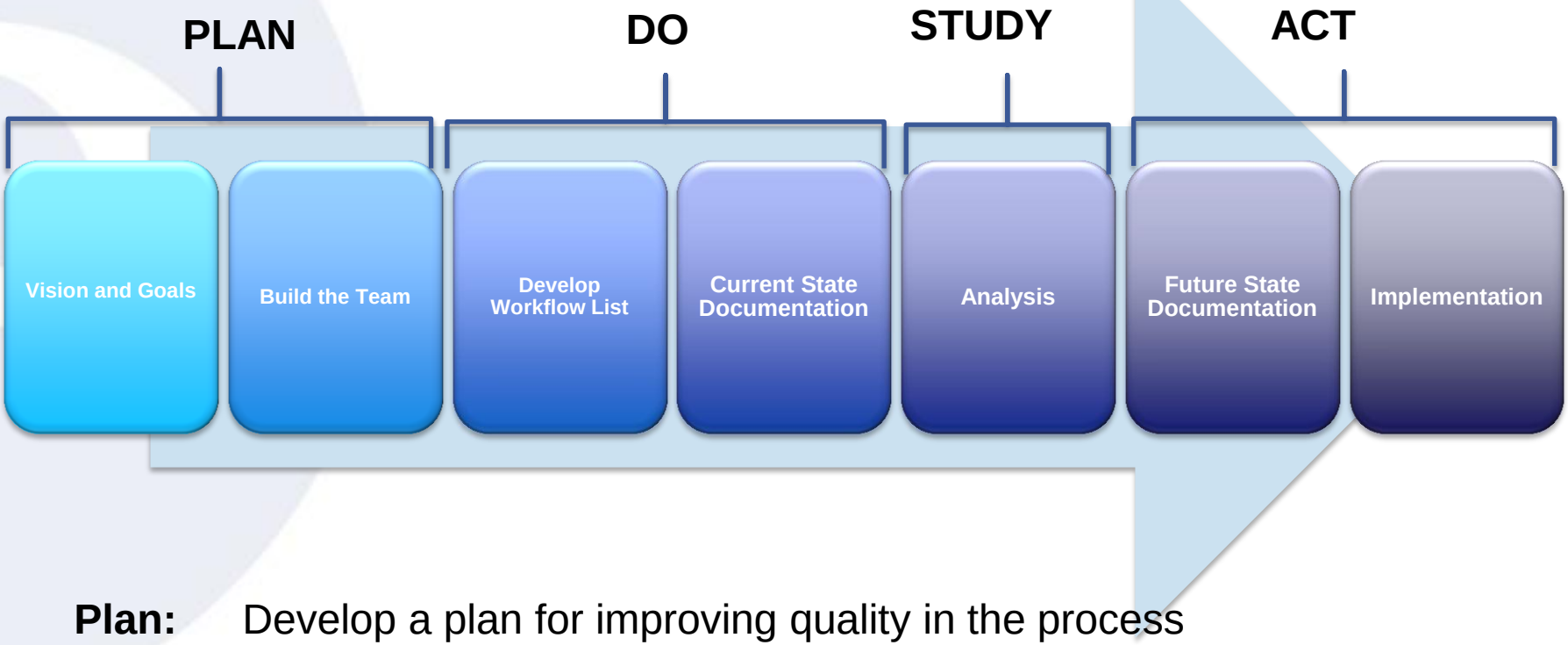
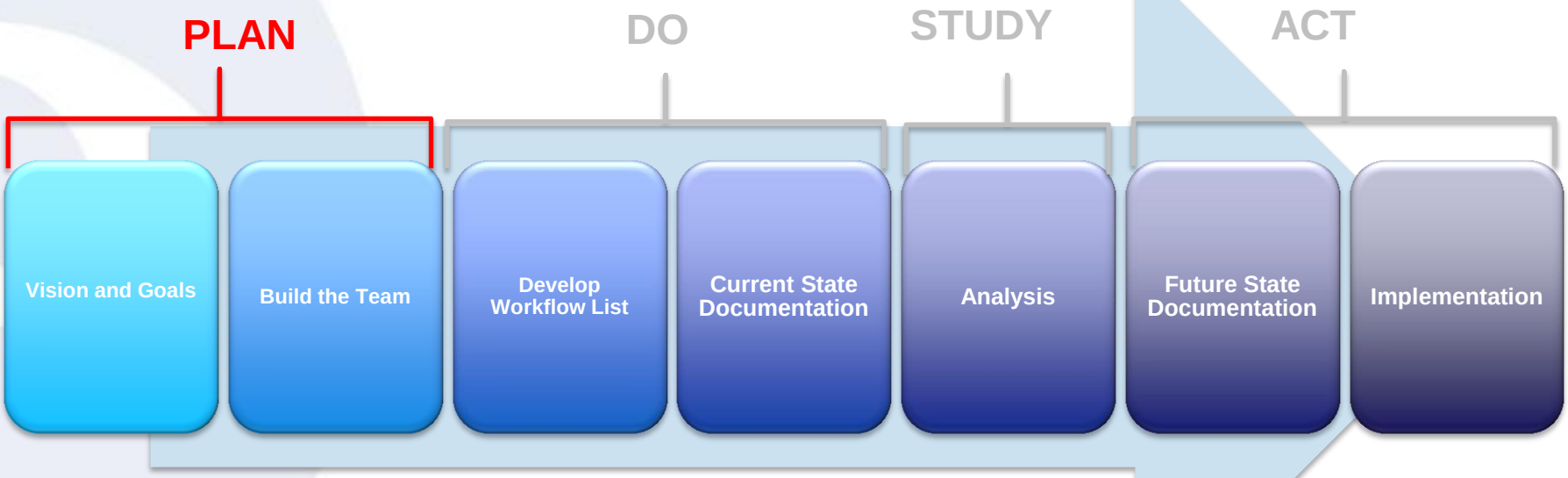
Process for Workflow Redesign



Plan: Develop a plan for improving quality in the process
Do: Execute the plan
Study: Evaluate feedback to confirm or adjust the plan
Act: Make the plan permanent

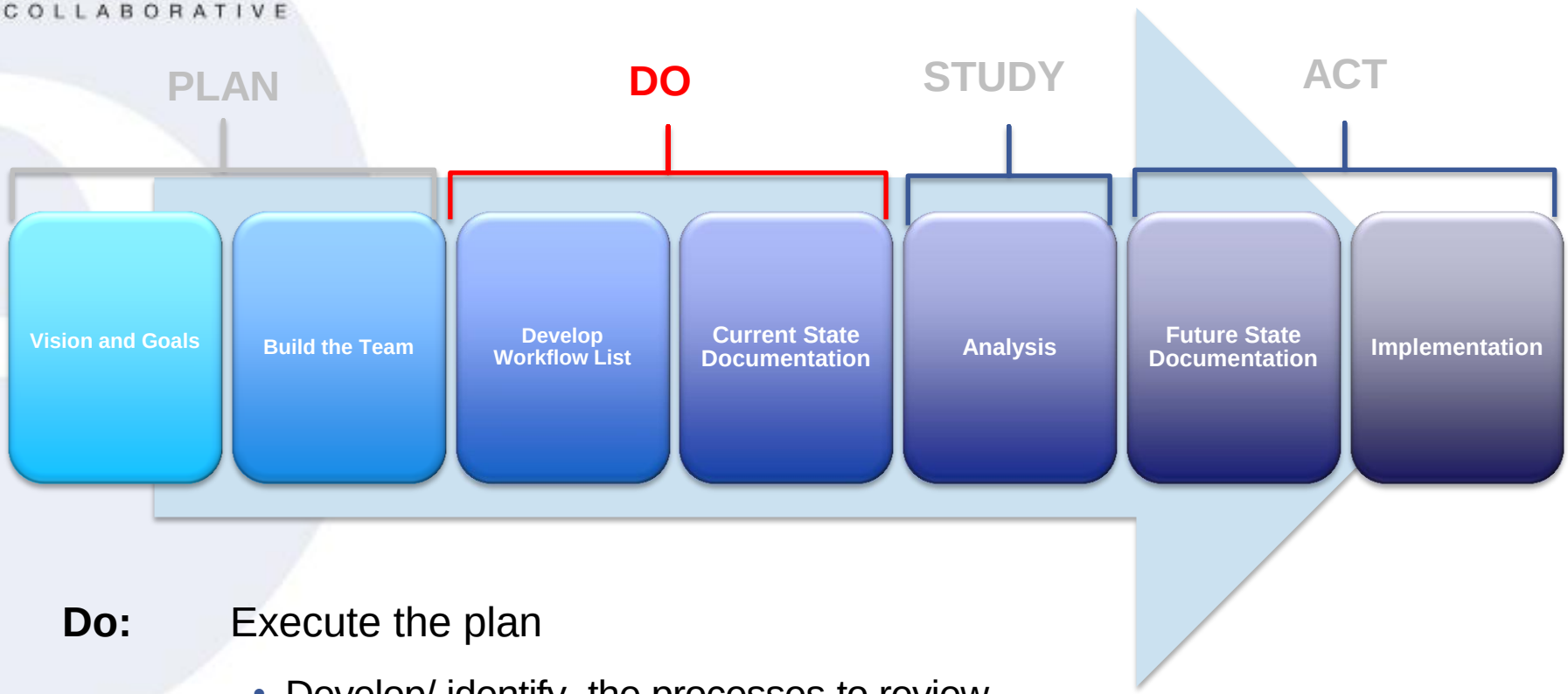
Process for Workflow Redesign



Plan: Develop a plan for improving quality in the process

- Understand your organizations/projects mission and goals.
- Establish the team who can support the project. Team members should include all relevant departments that will need to participate in the process

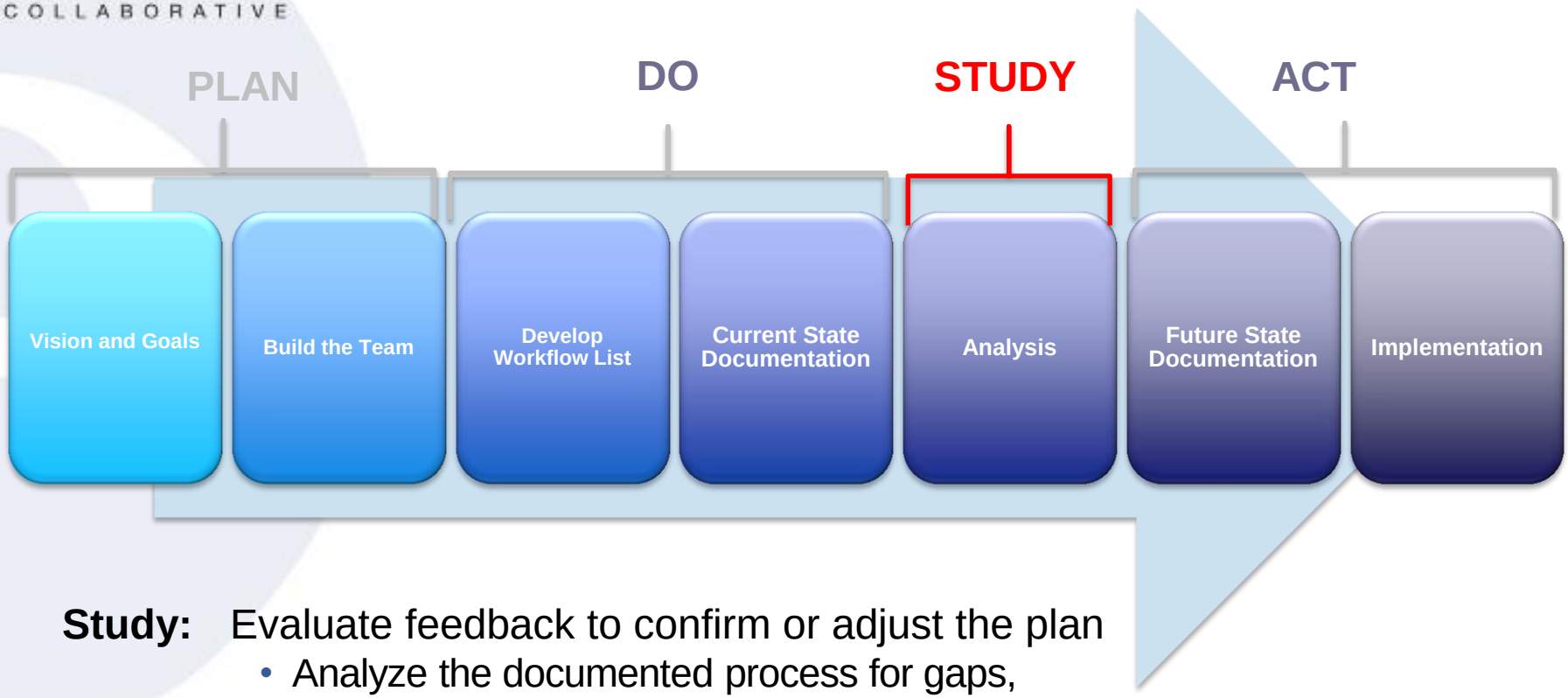
Process for Workflow Redesign



Do: Execute the plan

- Develop/ identify the processes to review
- Document the way a process is actually done at the facility

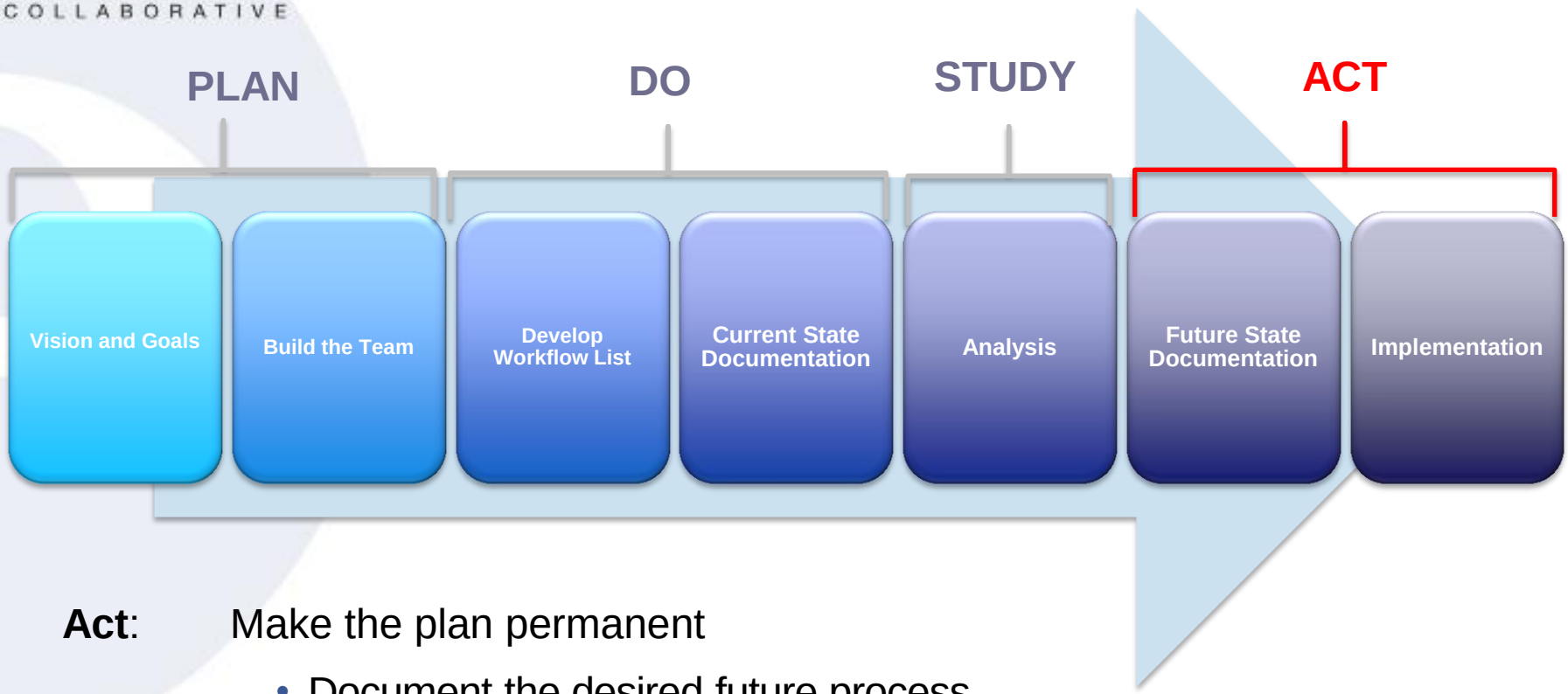
Process for Workflow Redesign



Study: Evaluate feedback to confirm or adjust the plan

- Analyze the documented process for gaps, redundancies and efficiencies

Process for Workflow Redesign



Act: Make the plan permanent

- Document the desired future process
- Implement the future workflow process

Roster of Important Workflows

- Telephone encounters/telephone triage
- Patient Check-in/Check-out
- Billing
- Document Management
- Labs (Internal/External)
- Referrals (Internal/ External)
- New Employee Orientation
- Ancillary Tests
- Prescription Management
- Reporting
- Helpdesk Workflow
- Patient Visit Workflow
- Consent Management workflow
- Care Transition Process

This is a list of several of the processes you may want to visit or revisit because:

- **Your office is implementing an EHR**
- **Your practice needs to revamp their care management processes**

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Example
Consent Management – Current State

The ability to view information within a local exchange is predicated on the patient providing consent to the health care facility.

“ I want to make sure I can obtain critical information on my patients if they have seen see another healthcare provider.”

Example
Consent Management – Current State

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“ I want to make sure I can obtain critical information on my patients if they have seen see another healthcare provider.”

Current consent process:

- May not exist if practice does not connect (share data or view data) with a RHIO
- May only include required HIPAA notices
- Forms are stored in the paper chart or scanned into the system documents folder

Consent Management – PDSA Model Application

" How can we develop our consent process."

PLAN

Identify the scope of the project (mission)

- Documenting and sharing consent flags so providers can access patient information in the exchange

Build the team

- Project team will need to include IT, patient registration, the RHIO and clinical leads- all the players with involved in success of the project

DO

Document the Current State

- Identify all processes impact by this new step (document the workflows)
- Identify all the roles who will need to be educated (staff and technical)
- Identify the policies and procedures that will be impacted
- Identify how the patients may need to be engaged

Consent Management – PDSA Model Application

" How can we develop our consent process."

STUDY

Analyze the Process

Identify gaps, inefficiencies and new requirements to accommodate the new process

- A need for education of front desk on providing informed consent
- Do we have the correct consent forms
- Configuration of consent fields in the system for transmission to the RHIO
- How to manage changes in consent values
- How to manage consent for minors

ACT

Document the new process

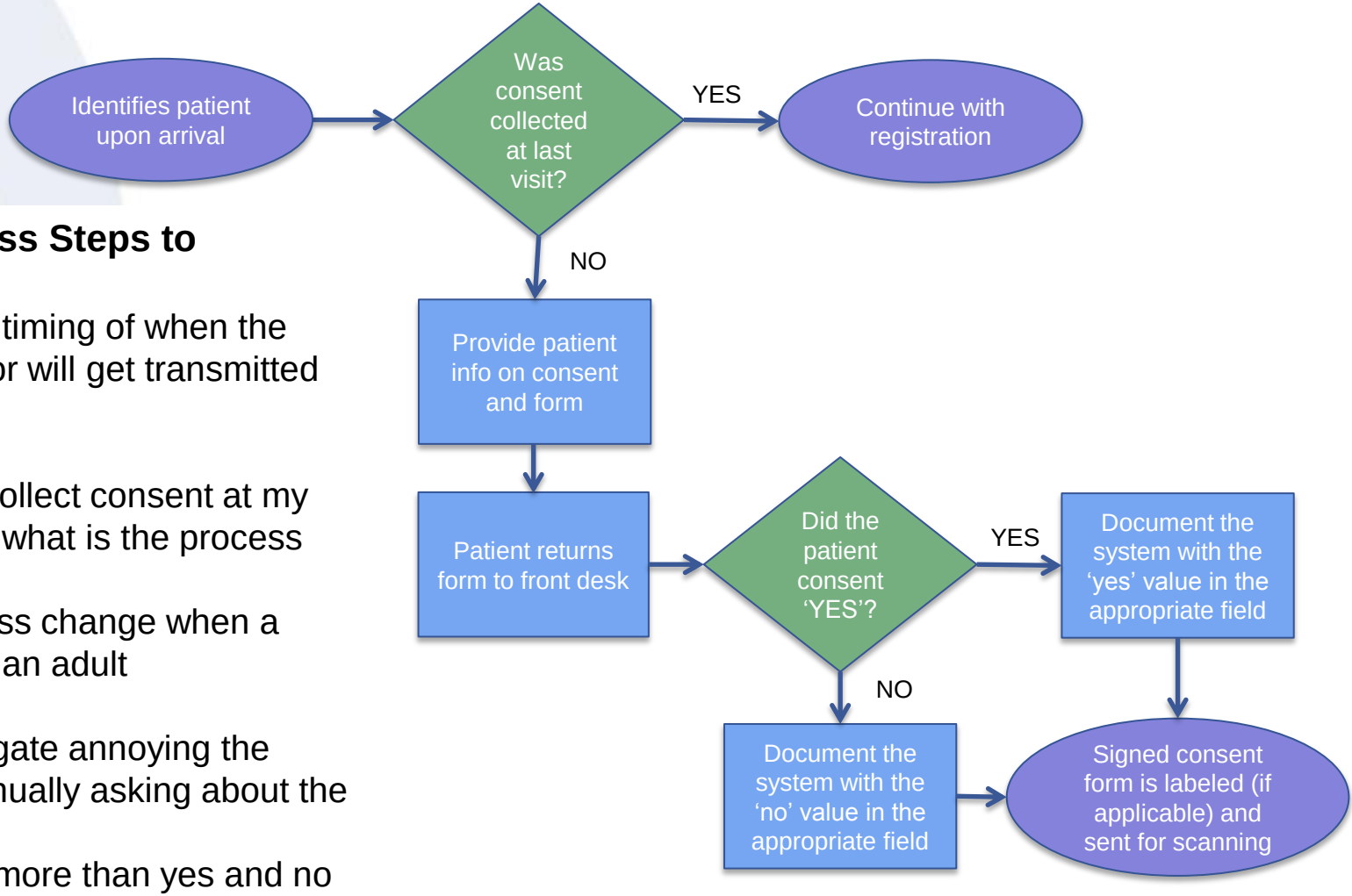
Define the desired workflow to account for all changes to existing process to accommodate the new consent values and forms

Implement

Move the new process into production.

Don't forget to monitor the process for challenges that may need to be fixed!

Example:
Consent Management – Future State



Additional Process Steps to Consider:

- Understand the timing of when the consent indicator will get transmitted to the RHIO
- Can providers collect consent at my facility and if so what is the process
- Does this process change when a minor becomes an adult
- How do we mitigate annoying the patient by continually asking about the RHIO consent
  - do I need more than yes and no values
  - how will they be treated in the transmission to the RHIO if at all

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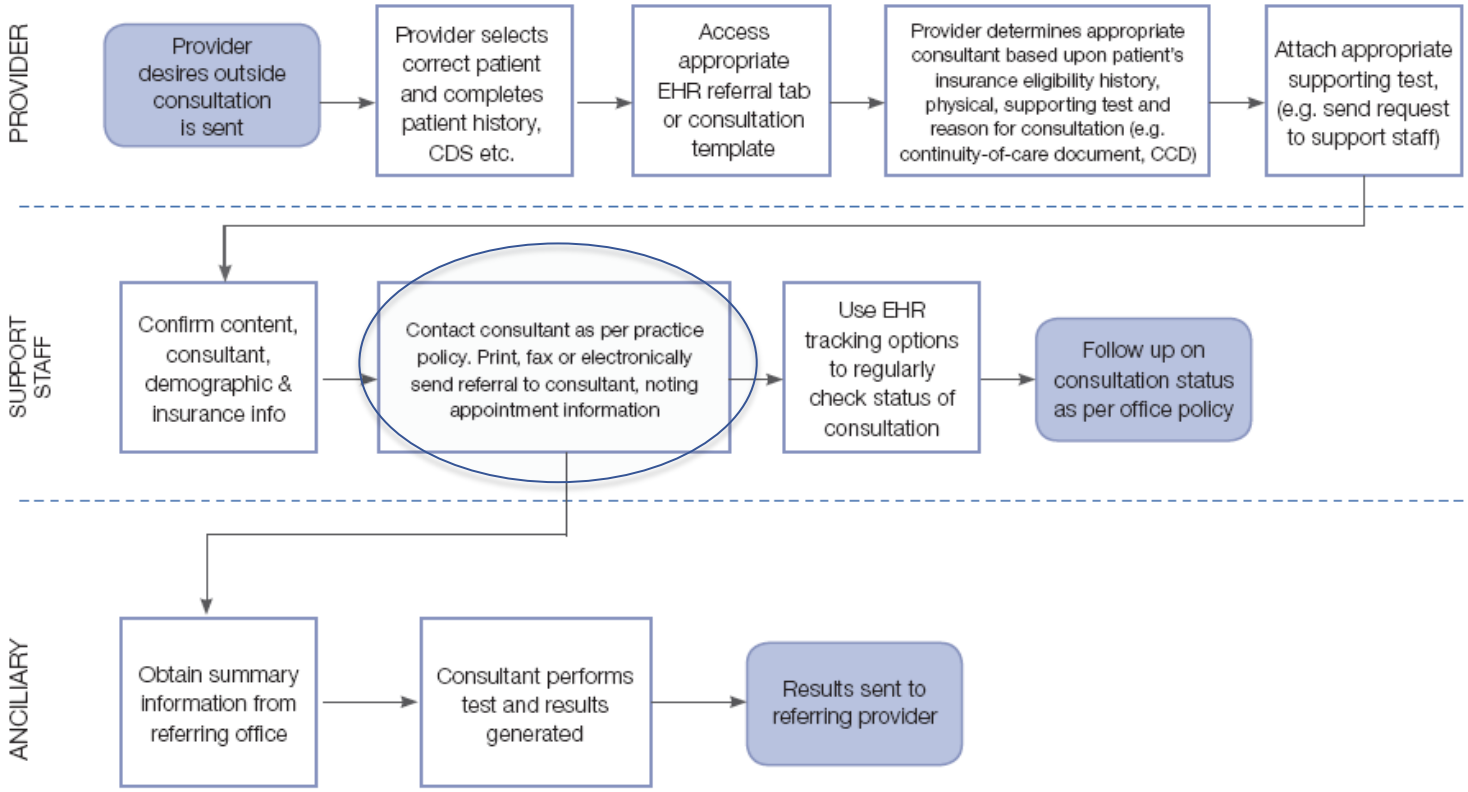
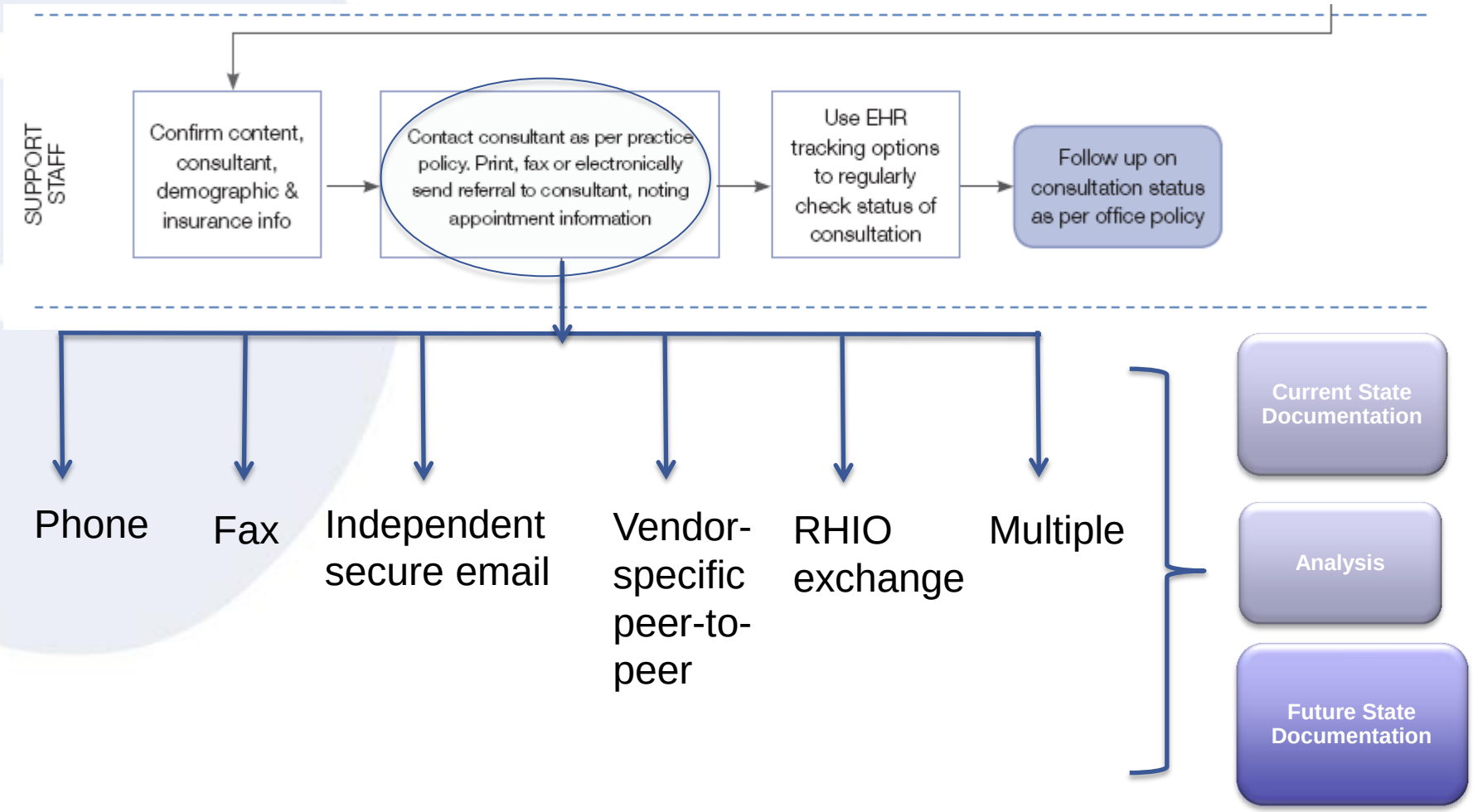
Example: Patient Referral Workflow

Referral Workflow

The workflow process for generating a referral encompasses the selection of a referral menu option, correct patient and appropriate test with related diagnosis in the EHR system. The workflow represents a typical referral process for insurance eligibility, selection of a medical consultant, the performance and interpretation of a test, and the return of results and or opinion to the referring provider.



As-Is & To-Be Analysis Element



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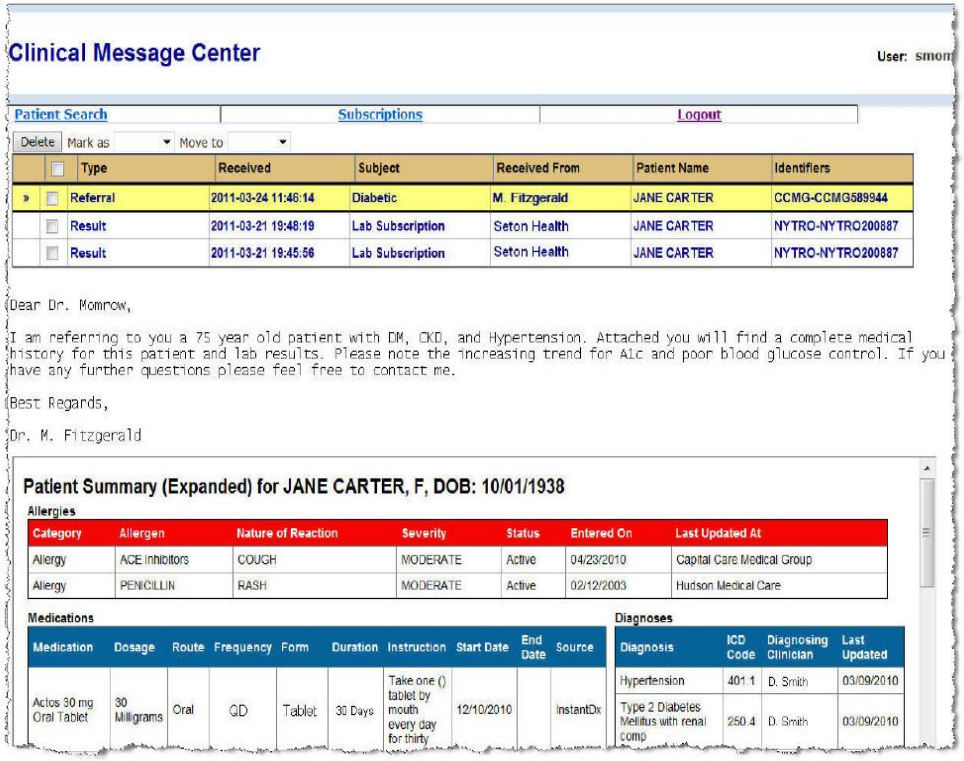
Example Output: HIXNY HealthyTalk http://www.hixny.org/



Clinical Message Center

User: smom

Patient Search | Subscriptions | Logout

Delete | Mark as | Move to

	Type	Received	Subject	Received From	Patient Name	Identifiers
»	Referral	2011-03-24 11:46:14	Diabetic	M. Fitzgerald	JANE CARTER	CCMG-CCMG589944
	Result	2011-03-21 19:48:19	Lab Subscription	Seton Health	JANE CARTER	NYTRO-NYTRO200887
	Result	2011-03-21 19:45:56	Lab Subscription	Seton Health	JANE CARTER	NYTRO-NYTRO200887

Dear Dr. Momrow,

I am referring to you a 75 year old patient with DM, CKD, and Hypertension. Attached you will find a complete medical history for this patient and lab results. Please note the increasing trend for A1c and poor blood glucose control. If you have any further questions please feel free to contact me.

Best Regards,

Dr. M. Fitzgerald

Patient Summary (Expanded) for JANE CARTER, F, DOB: 10/01/1938

Allergies

Category	Allergen	Nature of Reaction	Severity	Status	Entered On	Last Updated At
Allergy	ACE Inhibitors	COUGH	MODERATE	Active	04/23/2010	Capital Care Medical Group
Allergy	PENICILLIN	RASH	MODERATE	Active	02/12/2003	Hudson Medical Care

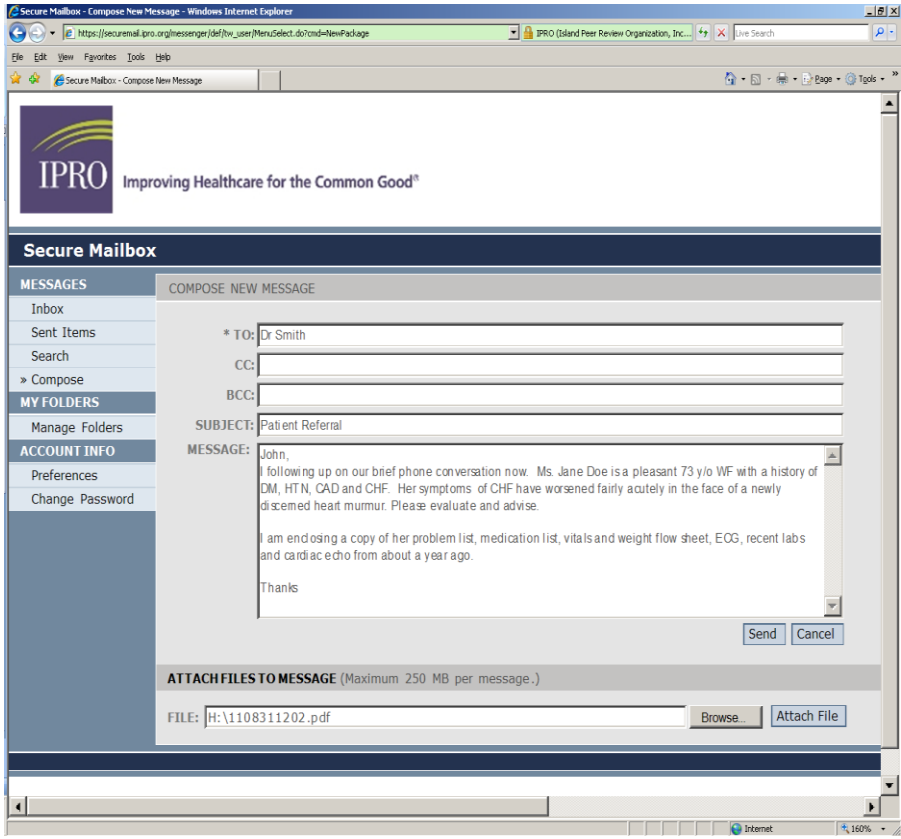
Medications

Medication	Dosage	Route	Frequency	Form	Duration	Instruction	Start Date	End Date	Source
Actos 30 mg Oral Tablet	30 Milligrams	Oral	QD	Tablet	30 Days	Take one () tablet by mouth every day for thirty	12/10/2010		InstantDx

Diagnoses

Diagnosis	ICD Code	Diagnosing Clinician	Last Updated
Hypertension	401.1	D. Smith	03/09/2010
Type 2 Diabetes Mellitus with renal comp	250.4	D. Smith	03/09/2010

Example Output: Independent Secure Email



Secure Mailbox - Compose New Message - Windows Internet Explorer

IPRO Improving Healthcare for the Common Good®

Secure Mailbox

MESSAGES
Inbox
Sent Items
Search
» Compose
MY FOLDERS
Manage Folders
ACCOUNT INFO
Preferences
Change Password

COMPOSE NEW MESSAGE

* TO: Dr Smith
CC:
BCC:
SUBJECT: Patient Referral
MESSAGE:

John,
I following up on our brief phone conversation now. Ms. Jane Doe is a pleasant 73 y/o WF with a history of DM, HTN, CAD and CHF. Her symptoms of CHF have worsened fairly acutely in the face of a newly discerned heart murmur. Please evaluate and advise.

I am enclosing a copy of her problem list, medication list, vitals and weight flow sheet, EOG, recent labs and cardiac echo from about a year ago.

Thanks

Send | Cancel

ATTACH FILES TO MESSAGE (Maximum 250 MB per message.)

FILE: H:\1108311202.pdf | Browse... | Attach File

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Conclusion

- Workflow analysis using process models is an efficient way to document current processes tracking information flow between stakeholders and technology
  - The redesign process aids in the implementation of efficiencies and consistencies among staff
  - Lays ground work for efficient decision making

- The PDSA model is a framework that can guide effective workflow redesign of clinical processes within and between organizations

Conclusion

- Key factors to a successful workflow study…
  1. Use consistent tools to analyze the current state
  2. Gather input from everyone involved in the process
  3. Strong project planning
  4. Willingness to change
  5. Assign a champion to the project
  6. Robust functionality in choosing an EHR

Questions?

Presenter Contact Information

Jaclyn Brinson, Program Manager Strategic Partnerships
New York eHealth Collaborative
jbrinson@nyehealth.org

Dr. Alan Silver, Medical Director
IPRO
asilver@ipro.org

HH Implementation Session 4: Patient-Centered Medical Home

Presenters: Christine Stroebel, Primary Care Information Project (PCIP)

Date & Time: Wednesday, March 27, 2012 2:30 pm eastern time

Registration Link: https://cc.readytalk.com/r/33dbmi0axq83

All training sessions (recordings and registrations) will be made available on the Medicaid website.

http://www.health.ny.gov/health_care/medicaid/program/medicaid_health_homes/ohitt_ehr_webinars.htm

Appendices

Process Modeling?

- Ordered sequences of activities and supporting information- describes how an organization achieves its objective
- Process Modeling:
  - **Describes**
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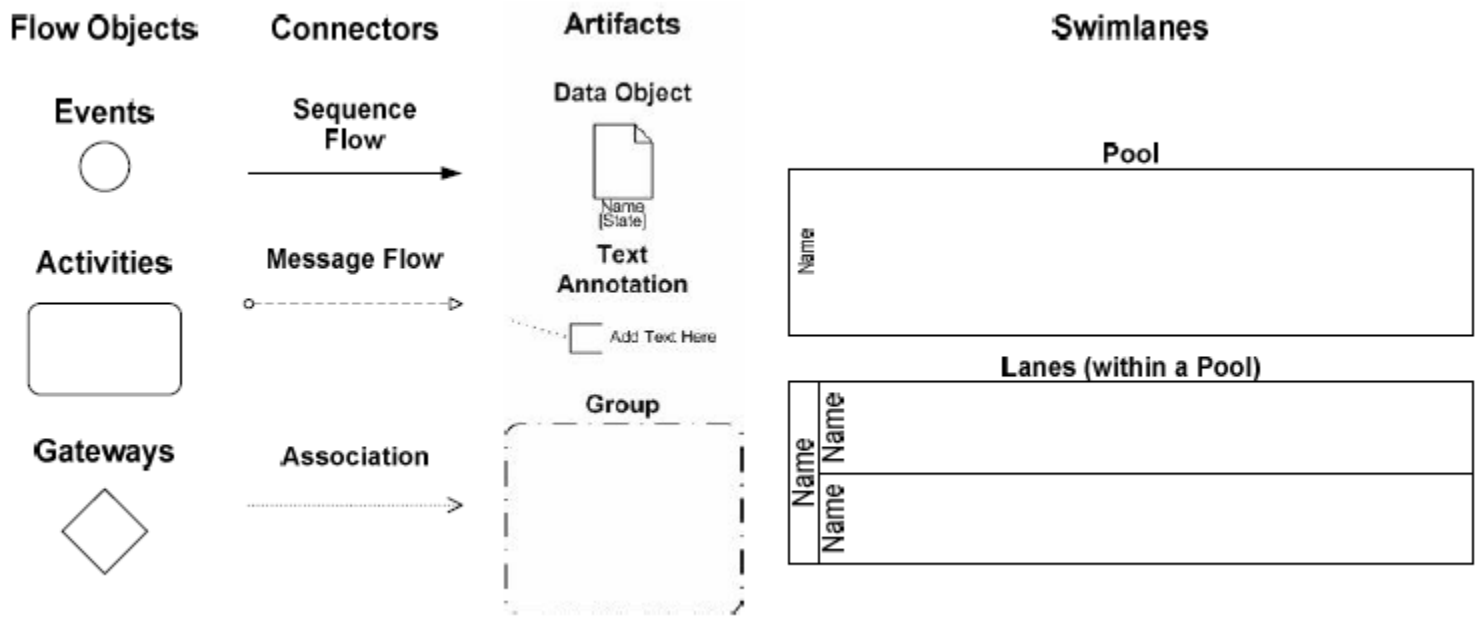
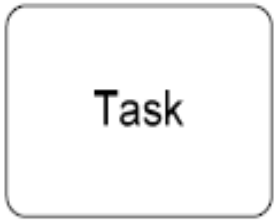
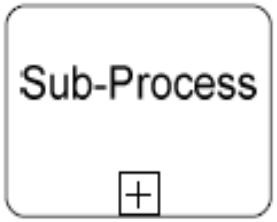
Diagram Elements

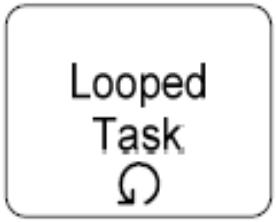


http://www.bestuurszaken.be/sites/bz.vlaanderen.be/files/documenten/organisatieontwikkeling/procesmanagement/20061116_OMG_BPMN_Tutorial.pdf

Activities







- An activity is work that is performed within a business process. An activity can be atomic or non-atomic (compound). The types of activities that are a part of a Process Model are: **Sub-Process**, and **Task**
- Activities are rounded rectangles
- They can be performed once or can have internally defined loops

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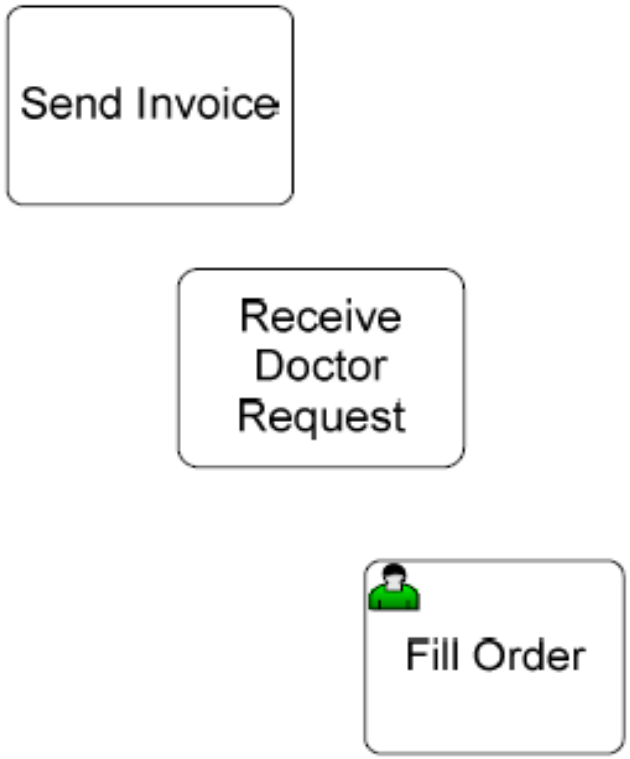
Tasks

- A Task is an atomic activity that is included within a Process. A Task is used when the work in the Process is not broken down to a finer level of Process Model detail
- There are specialized types of Tasks for sending and receiving, or user-based Tasks, etc.
- Markers or icons can be added to Tasks to help identify the type of Task



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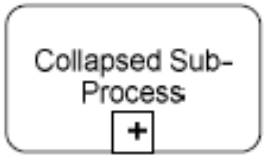
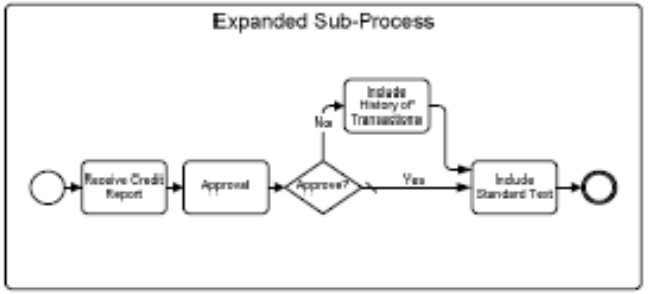
Sub-Processes

- Sub-Processes enable hierarchical Process development
- A Sub-Process is a compound activity that is included within a Process. It is compound in that it can be broken down into a finer level of detail (a Process) through a set of sub-activities
- For a collapsed version of a Sub-Process, The details of the Sub-Process are not visible in the Diagram. A "plus" sign in the lower-center of the shape indicates that the activity is a Sub-Process and has a lower-level of detail.
- For an expanded version of a Sub-Process, the details (a Process) are visible within its boundary.
- There are two types of Sub-Processes: Embedded and Independent (Re-usable)





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Events

- An **Event** is something that "happens" during the course of a business process. These Events affect the flow of the Process and usually have a trigger or a result. They can start, interrupt, or end the flow
- Events are circles
  - The type of boundary determines the type of Event

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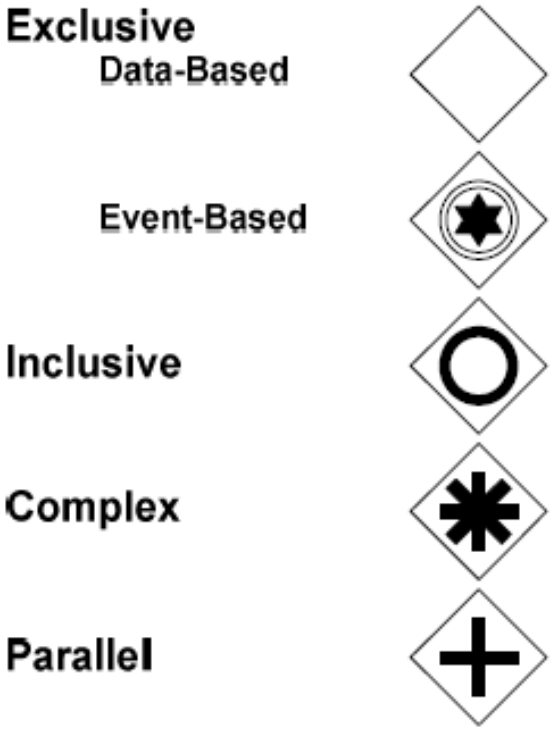
Gateways



- **Gateways** are modeling elements that are used to control how Sequence Flows interact as they converge and diverge within a Process
- All types of Gateways are diamonds
  - Different internal markers indicate different types of behavior
  - All Gateways both split and merge the flow
- *If the flow does not need to be controlled*, then a Gateway is not needed. Thus, a diamond represents a place where control is needed

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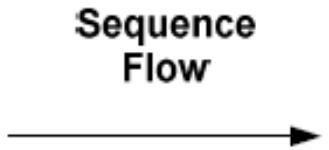
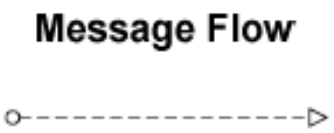
Connectors



- A **Sequence Flow** is used to show the order that activities will be performed in a Process



- A **Message Flow** is used to show the flow of messages between two entities that are prepared to send and receive them

- An **Association** is used to associate data, information and artifacts with flow objects

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Sequence Flow

- A Sequence Flow is used to show the order that activities will be performed in a Process
- The source and target must be one of the following objects: Events, Activities, and Gateways
- A Sequence Flow cannot cross a Sub-Process boundary or a Pool boundary

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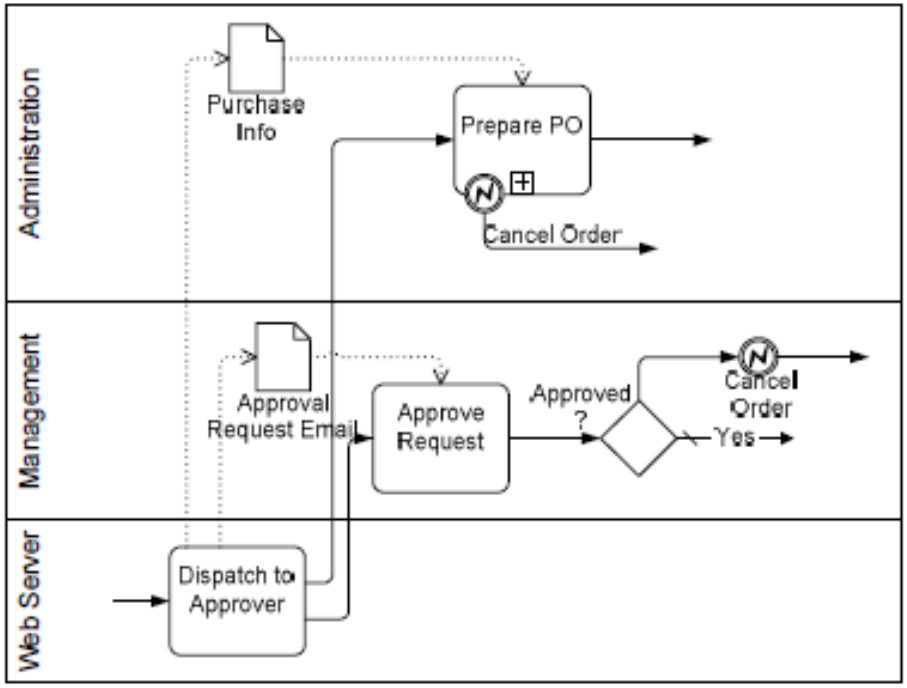
Swimlanes

- Lanes represent sub-partitions for the objects within a Pool
- They often represent organization roles (e.g., Manager, Associate), but can represent any desired Process characteristic
- Sequence Flow can cross Lane boundaries



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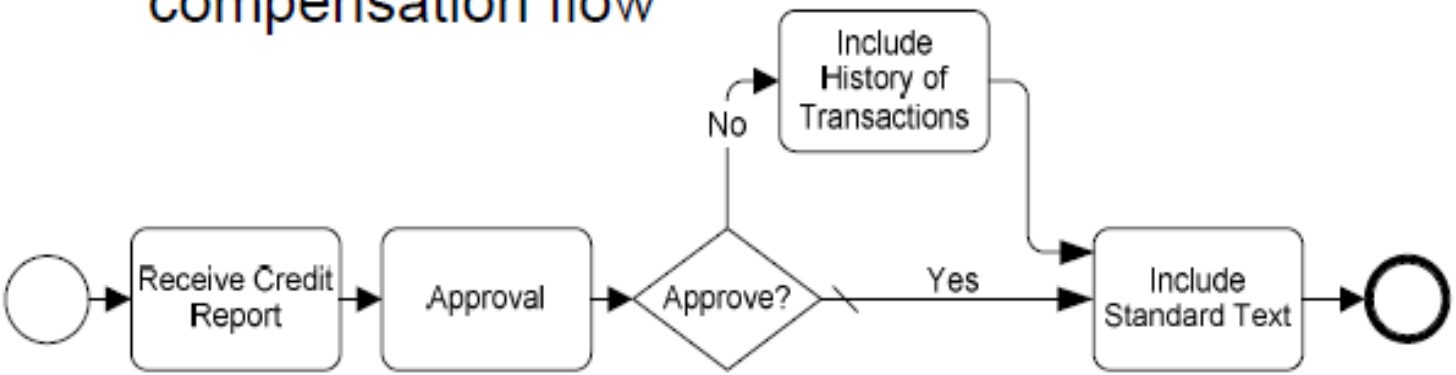
Normal Flow

- Normal Sequence Flow refers to the flow that originates from a Start Event and continues through activities via alternative and parallel paths until it ends at an End Event
  - Normal Flow does not include exception flow or compensation flow



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