Project Management Methodologies to Guide EHR Optimization

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Objectives

• Define the Phase Gate process and lean methodologies for change management.
• Identify the organizational benefits of a centralized change control process.
• Identify challenges and barriers to implementing a formalized change control process
• Consider approaches to sustaining a change management process
Background

- Corporate health system - regional market
- 4 Hospitals with recent inpatient CPOE Go-Lives
- Hybrid state EMR
- Completing Meaningful Use attestation- year 2 stage 1
- Diverse patient populations
- 3- Medical Residency programs
- 1 Magnet Hospital
Case for Process Change

• Growing list of change requests
• Lack of standardized process for evaluation
• Poor communication
• Cost not factored into request
• Visibility
• Lacked focus, strategy and ownership
Objectives for Phase Gate

- Create market platform for request submission and management
- Create focus through the gates
- Establish clear requirements before development
- Bring customers into application/process development
- Promote teamwork
- Improve communication: clinicians, leadership
- Cost integration
- Provide metrics
Phase Gate Team

• Lean focus/participation
  – Chief Medical Information Officer (CMIO)
  – Clinical Informatics Pharmacist
  – Informatics Nurses
  – Technical Expertise (Ben Giovingo)
  – Lean Director
Tool Selected - “Phase Gate”

- Microsoft SharePoint
  - Custom form created to capture requests
  - Captured data grouped and sorted based on status and facility
  - Team notification of new request/status updates
Building the process/methodology

1. IDEA – Request submitted
   - Gate 1 – Scoring
   - Gate 2 – Further Review
   - Deliverable: GO – KILL - HOLD

2. DEVELOPMENT – User requirements

3. BUILD – System build
   - Gate 3 – Testing & Review
   - Gate 4 – Release to production

4. COMPLETE

5. CLOSE/DECLINED
Process Flow

**Gate 1:** Idea Screen

- **Evaluation & Ranking**
  - Change Request Submission

**Gate Review Criteria**

- GO - KILL - HOLD (Re-Direct)
  - Idea Screening Checklist
  - GO - RECYCLE
  - CMO, CMIO, RN Leaders, Med Staff, President

**Gate 2:** Vetting

- Build and Beta Test
  - Technical Review
  - GO - RECYCLE
  - CIO, CMIO Clinical and Business Apps

**Gate 3:** Approval

- Validation and User Testing
  - Final Review
  - GO - KILL - RECYCLE
  - CIO - CMIO Clinical and Business Apps

**Gate 4:** Launch

- Launch

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**“Fast Track”**

IDEA

CONCEPT

PRODUCT

Informatics IT
User enters change request- immediately becomes an IDEA

Request is evaluated by “GATE 1” change control team

Approved request- informatics begins DEVELOPMENT

Gate 1 team determines request is controversial, or wants more input

GATE 2 change Control Team- will review individual request that is controversial or approve in bulk via consent agenda

Uncertain outcome eg insufficient user info etc- remains in IDEA

Gate 1 team declines/does not approve

Goes into build status when it is sent to the IT build team

Moved to COMPLETE when change is validated in LIVE

CLOSED/DECLINED
Current Requests by the Numbers

Change Requests

- Idea- 30
- Gate 1- 10
- Development- 19
- Build- 28
- Completed- 605
- Closed/Declined- 113

605, 75%
113, 14%
30, 4%

Benefits from Phase Gate

• Efficiency in change implementation
  - MU, Compliance, Safety initiatives etc.
• Rational utilization of resources
• Improved provider engagement and satisfaction
• Greater standardization across market
• Improved organizational change/culture
• Innovation
Challenges

• Cultural change
• Inappropriate usage
• User response
Moving forward

• Greater utilization through education
• Freezing the new process
• Integration with new technology
Change Management

Submit a Change Request
Change Management

EMR Optimization

Change Requests

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<th>New</th>
<th>Actions</th>
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- **Status**: 1 - Idea (Stage 0) (33)
- **Status**: 2 - Gate 1 (8)
- **Status**: 3 - Development (Stage 1) (18)
- **Status**: 5 - Build (Stage 2) (34)
- **Status**: 6 - Completed (606)
- **Status**: 7 - Closed / Declined (114)

Gate 1 Scorecard
## Change Management

### Change Requests

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- **Edit** | **ID** | **First Name** | **Last Name** | **Description** |
- **Status**: 1 - Idea (Stage 0) (33)

- **Facility**: All Facilities (5)
  - 1080 Mia Mendoza: Add ability for nursing to notify next nurse that home medication documentation is incomplete at time of shift.
  - 1114 Deanna Horner: Med revisions to the ED Adult Common medications iForm: 1) add methylprednisolone 40 mg oral.
  - 1117 Jamie Steele: remove the ability to restrict pre orders to the current encounter.
  - 1118 Jamie Steele: remove the ability to restrict pre orders to the current encounter.
  - 1130 Mia Mendoza: Add additional sections in ADmission Data assessment for Immunizations. See attached.

- **Facility**: MacNeal (7)
- **Facility**: Weiss (6)
- **Facility**: West Suburban (8)
- **Facility**: Westlake (7)
## Change Management

### Gate 1 Scorecard

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<tr>
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<th>Patient safety and quality</th>
<th>User experience</th>
<th>Impact</th>
<th>Regulatory requirements</th>
<th>Strategic alignment</th>
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QUESTIONS?

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Articles


