# The Importance of Governance in Developing Clinical Content

Kevin D. Carr, MD August 21, 2007

#### Overview

What is clinical content?

Why is governance structure important?

Discussion of real life example

## Types of Clinical Content

Clinical vocabularies

**Flowsheets** 

Orders/ Order sets

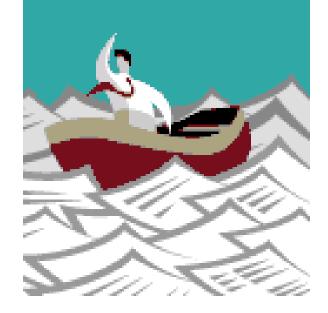
Treatment guidelines

Care Plans

Clinical (Business) Rules

Alerts and Reminders

Clinician Note Templates



Patient and Provider Education Materials

**Discharge Planning Templates** 

Third Party Clinical Content

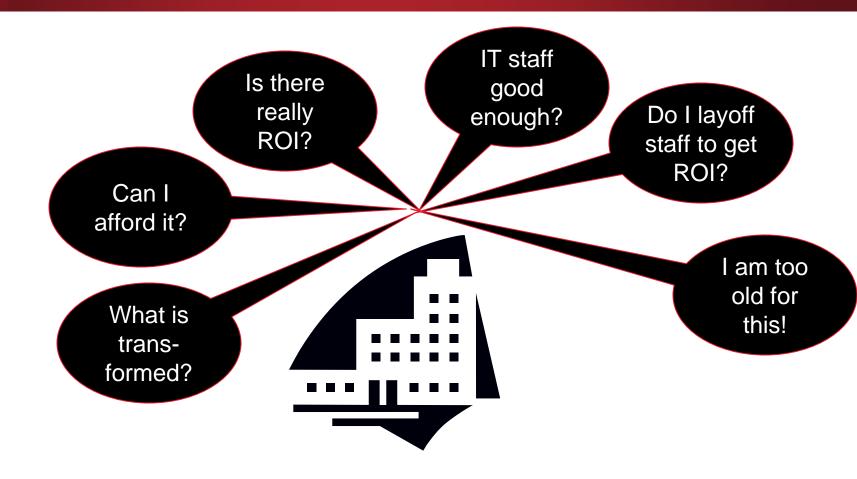
#### HIT:

#### The Provider Problem?

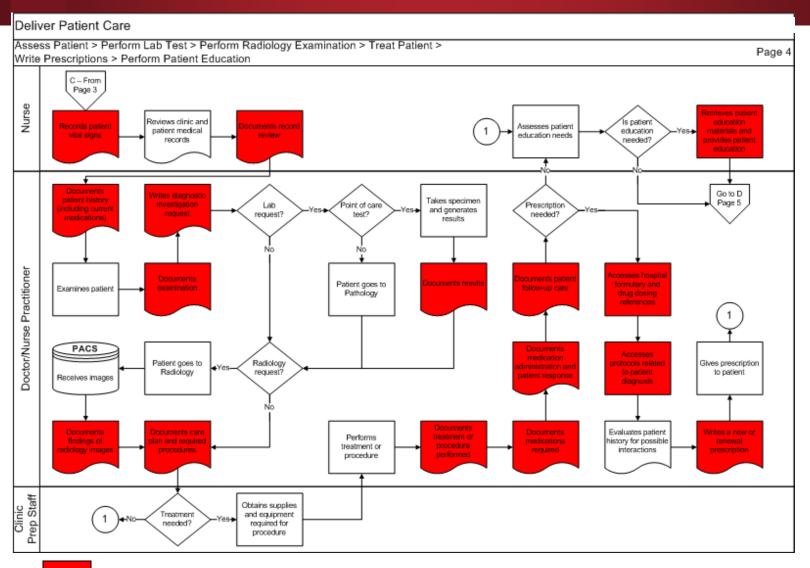


#### HIT:

#### The Institutional Problem?



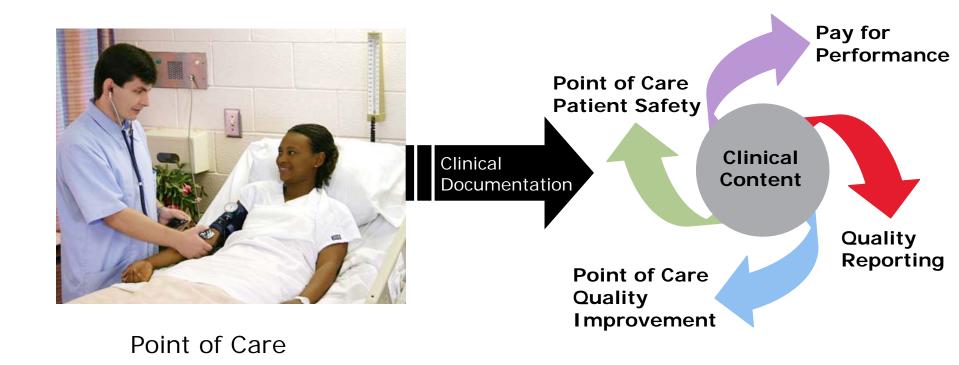
#### Potential Clinical Content Impact Points - Example



- Items in red potentially impacted by clinical content

#### Clinical Content

Clinical Content goes beyond simply documenting care.



## The Need for Clinical Content Strategy and Governance

## Benefits of having a strategy and governance:

- Defines beginning and end points
- Improves clinical processes across care settings
- Repeatable processes can improve patient care quality/ efficiency
- Leverages limited resources more costeffectively

#### Desired Goal:

- Improved patient care
- EHR is adopted

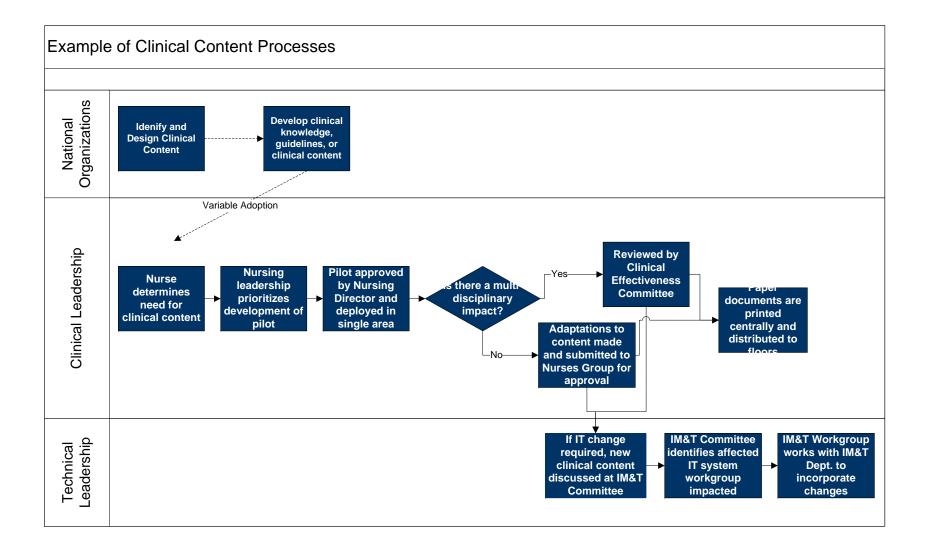
#### Risk of no strategy and governance:

- Fail to meet project milestones on schedule
- Ineffective use of expensive resources
- Poor clinician adoption of system
- Increased medical risk to patients

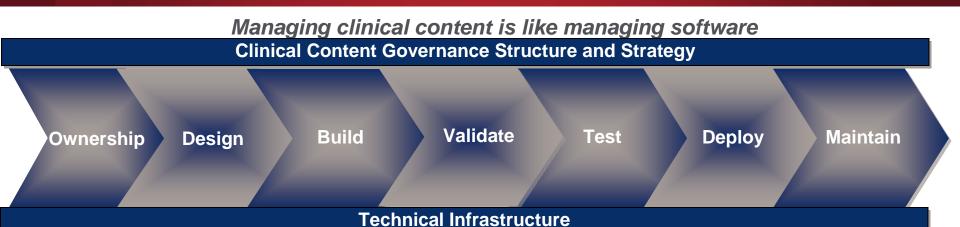
#### **WARNING!**

- Efficiency, quality of care targets not met
- EHR is not adopted

## Paper Clinical Content



## Clinical Content Lifecycle



- Starting point; basis for lifecycle
- Includes ownership of process and content design decisions
- Sets foundation for governance
   structure
- May be consolidated or divided based on structure, phase, tech considerations and scope

- Based on chosen content source's experience
- Design sessions Include both clinical and technical stakeholders
- Output includes specifications, requirements, and possibly prototypes

- Content builds into solution chosen by organisation
- Combination of imported content and original build
- Use imported scripts developed in conjunction with content owner and EHR
- Introduces
  clinical content
  to core audience
  to ensure that it
  meets design
  requirements
- Prototype
  validation to
  limited audience
  (clinical
  champions/
  subject matter
  experts)
- Final Validation
  by selected
  larger owners of
  the specific
  clinical content

- Divided into two phases: Unit and Integration Testing
- Unit testing ensures clinical content function correctly within the application
- Integration testing allows that data input into clinical content tools functions properly across applications
- Errors requiring significant change to clinical content may require return to prior phase(s)

- Includes enduser training, communication and go-live planning
- Final process adaptation and change management may occur
- Go-live may occur using a phased approach

- Requires well defined SLAs based on governance structure
- Includes field/ technical support, add'I training, and updates to content
- Change may be incremental or produce another iteration of the entire lifecycle

## Clinical Content Lifecycle Governance

	Ownership and Strategy	Design	Build	Validate	Test	Deploy	Maintain
Lifecycle Action Steps	Manage clinical content lifecycle Strategy	Prioritise Clinical Content & identify integration points	Build prototype and final clinical content (post- validation)	Present prototype to Care Setting Design Team members	Develop Testing Scripts	Deploy New Clinical Content	Review Clinical Content Sources periodically for updates
Strategy Group				_	ng maintenance; and functional requ	irements	
Design Groups							
Build, Test and Deploy Groups							

## Clinical Content Lifecycle Roles

	Ownership and Strategy	Design	Build	Validate	Test	Deploy	Maintain
Lifecycle Action Steps							
Steering Comm. And Clin. Advisory	Manage clinical content lifecycle Strategy	Prioritise Clinical Content & identify integration points			ng maintenance; and functional requ	irements	
Physician Advisory		Develop Clinical Content Design and Functionality Requirements		Present prototype to Care Setting Design Team members	Develop Testing Scripts		Review Clinical Content Sources periodically for updates
Project Team			Build prototype and final clinical content (post- validation)	Validate clinical content meets original req's	Execute Testing Scripts	Deploy New Clinical Content	

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#### **London Cluster**



#### **Quick Facts**

- -7.2+ million citizens
- -150,000+ staff
- -43 hospitals
- -1,660 GP practices

#### **Care Settings Supported**

- -Acute Trust
- -General Practitioner
- -Mental Health
- -Community Health

## How do we ensure governance success?

Teamwork and treaties

Responsible bodies

Unbiased clinician and administrative leadership

Sustainability plan

Technical infrastructure

#### Questions?

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## Layers of Leadership - Strategy

#### Strategic Group

- Sets direction for complete provision of clinical content
- Holds "master list" of required clinical content
- Prioritizes clinical content development against project timelines
- Helps direct clinical content sources to be used
- Manages conflicts and redundancy between design teams
- Signs off on design reqts. before handing over to build teams
- Participates in project communication and change management plan development to ensure clinical adoption of content
- Comprised of clinicians and non-clinicians, knowledgeable about clinical content and whom are looked to as authorities by peers

## Layers of Leadership - Content Design

#### **Design Teams**

- May be based on specialty/ disease process (ie. Pediatrics or Diabetes), system, or role (ie. Nurse or physician)
- Viewed as experts in their field and respected by peers
- Have access to leading practice examples and peer input
- Determine detailed clinical content required to support their specialty or disease
- Design content output: standardized design requirements
- Validate content after build team builds prototype
- Aware of how to drive clinician adoption

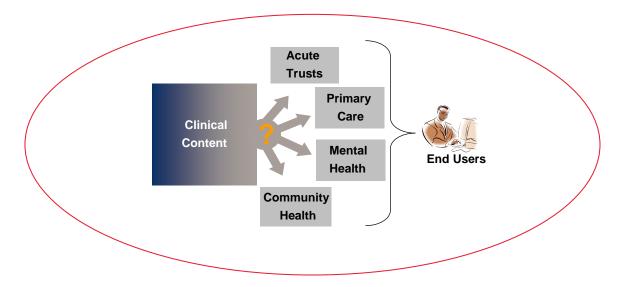
### Layers of Leadership – Implementation

#### Build, Test, and Deploy Teams:

- Review designs for feasibility
- Create prototype
- Build clinical content in clinical system
- Test content
- Design and develop user guides and training
- Deploy content to clinicians (apply change, communication and roll out plans)
- Primarily comprised of software vendor representatives and some NHS technical representatives

## Selected Strategic Decision Recommendations

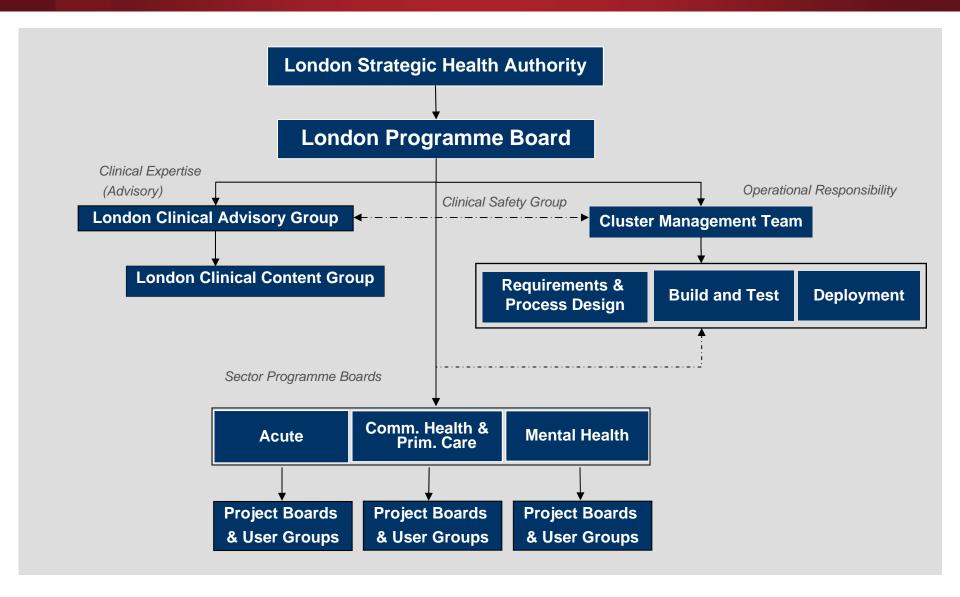
#### What are the your goals for clinical content?



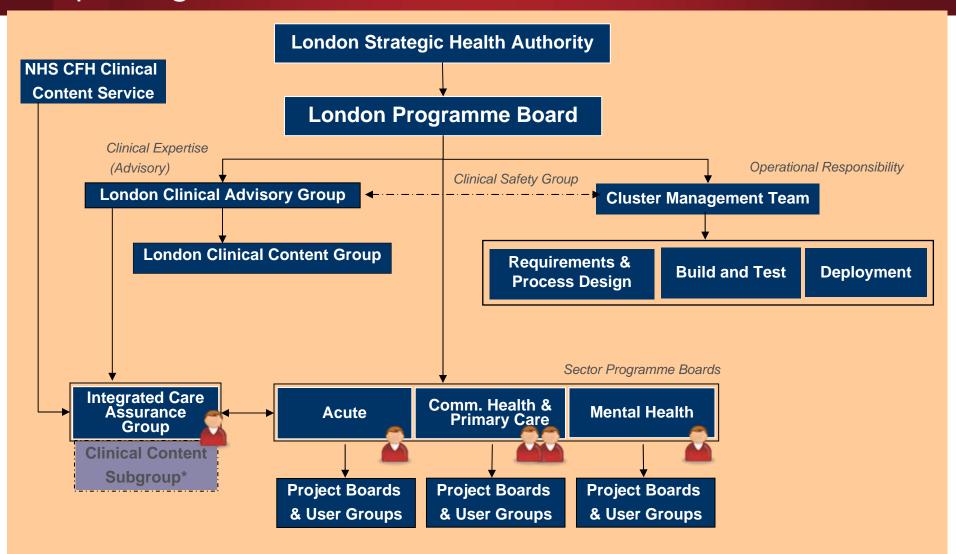
How can we coordinate the management of clinical content across several different applications?

How should the management team react to requests for customisation of clinical content?

#### Current State Clinical Content Governance



## Future State Clinical Content Governance Reporting Structure



<sup>\*</sup> Clinical Content subgroup is not a separate entity, but a subgroup of the five clinical content "heads" already represented.