Information Governance & Data Stewardship for an H.I.E.

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Governance in an H.I.E. context

- Develop long-term strategy & plans for the H.I.E.
- Set *information (data)* governance policy
- Identify, prioritize, and **fund** initiatives
- Ensure that the H.I.E. supports business priorities
- Manage H.I.E. investments (ROI)
- Secure stakeholder commitment (accountability)
- Define information exchange protocols
- Establish and empower committees
  - *Steering Committees*
  - *Standards Committees*
  - *Working Groups (Clinical & Administration)*
Data Stewardship in an H.I.E. context

- Business owner and champion of the H.I.E. information
- Operationalize data governance policy (Information Management Agreements, Business Agreements, Service Level Agreements, etc.)
- Harmonize processes (e.g. Registration, Search)
- Develop data standards (codes, messages, etc.)
- Plan and execute ongoing changes to H.I.E.
- On board new H.I.E. data sources and monitor compliance
- Maintain a high degree of data integrity in the H.I.E.
  - Monitor and maintain data accuracy
  - Resolve data integrity issues
  - Ensure source-record quality
  - Resolve enterprise linkages
  - Resolve enterprise identifier tasks
  - Provide data integrity reports
Benefits of solid governance

• Clarity of purpose and priorities
• Accountability (this is a 2-way street by the way)
• Stakeholder alignment & participation
• Empowerment
• Communicates *data is a shared asset*
Benefits of good data stewardship

• Adoption – a **shared** Electronic Health Record is based upon **TRUST** “how good are your processes, how good is your data?”

• Reduced clinical risk - accurate, consistent, timely identification of clients at the point of registration & integrity in clinical data.

• Compliance – critical processes to the H.I.E. become “enterprise” processes (e.g. adoptions, VIP, results validation, etc).

• Improved efficiency – quicker registration, reduced duplicates, fewer rejections, less data cleansing, enhanced processes such as metabolic screening.
“Why do we need a business owner?”

- Humans have a natural tendency to organize on “functions” - ER, OR, DI, ICU, and each group creates “their” data.

- Adoption of a Health Information Exchange is based on TRUST in the information, someone needs to care about the data – not the functions – “our data”.

- Solid governance and data stewardship are about trust, adoption, behaviour changes, mitigation of risk, and better care (H.I.M. groups have known this for years).

- With H.I.E. many business functions become enterprise functions - whether you want them to or not……
What if we don’t have a data stewardship group?

• There is no free ride – an H.I.E. will create workload and the clinical risk conditions – “do nothing” you accept these risks.

• A data stewardship group creates awareness and processes that involve everyone in data integrity when the data is created at the point of care.

SOME REAL WORLD EXAMPLES:
- Back end validation errors on demographics & identifiers reduced from 5-10% to under 2% (cost to remediate 1 error?)
- Duplicates reduced from 2-5% to 1-2% (cost to merge 2 charts?)
- 25% increase in rate of potential linkages resolved (everyone helps)
- Real time reporting of a clinical overlay (significant reduction in risk)
- 25-50% reduction in the number of records needing to be re-submitted by contributing organizations (cost to re-submit 1 record?)
## Data Stewardship - Who does what?

<table>
<thead>
<tr>
<th><strong>H.I.E. Data Stewards</strong></th>
<th><strong>“Source System” Organization</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Run a Business Working Group</td>
<td>Participate in a Business Working Group</td>
</tr>
<tr>
<td>Participate in health standards</td>
<td>Provide health standards requirements</td>
</tr>
<tr>
<td>Create agreements (e.g. MOU, SLA, BAA)</td>
<td>Honour agreements</td>
</tr>
<tr>
<td>Educate and “on-board” new sites</td>
<td>Provide champions and dedicated contacts</td>
</tr>
<tr>
<td>Harmonize processes</td>
<td>Champion behavior change and adoption</td>
</tr>
<tr>
<td>Audit and monitor compliance</td>
<td>Maintain compliance</td>
</tr>
<tr>
<td>Determine inappropriate use</td>
<td>Action inappropriate use</td>
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<tr>
<td>Report “source tasks” (e.g. duplicates)</td>
<td>Examine/work source tasks at source</td>
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<tr>
<td>Work “enterprise tasks” (e.g. linkages)</td>
<td>Support enterprise task resolution</td>
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<tr>
<td>Plan new releases &amp; enhancements</td>
<td>Input enhancement requirements</td>
</tr>
<tr>
<td>Provide reports</td>
<td>Input report requirements</td>
</tr>
</tbody>
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There are three main roles typically in a data stewardship group:

- Managers
- Analysts
- Stewards

The diagram shows the structure of the data stewardship group with roles such as Health Records Analyst, Data Integrity Analyst, and Systems Analyst.
Roles & responsibilities in a data steward group

Managers typically come from two backgrounds:

Health Information Management background:
- Participate in Steering Committee or Senior User on the Board
- Develop & Promote Health Information Standards
- Design and champion harmonization of HIM processes (duplicates, overlays, enterprise linkages, court orders, etc)
- Prioritize and assign tasks to data stewards
- Mentor data stewards and stakeholder source system users
- Educate and on-board new sites – profile data, examine data practices
- Run a Business Working Group
- Manage Business Agreements

Registration/Patient Administration background:
- Participate in Steering Committee or Senior User on the Board
- Design and champion harmonization of Registration & Administration processes (admissions, patient search, etc.)
- Prioritize and assign tasks to data stewards
- Mentor data stewards and stakeholder source system users
- Educate and on-board new sites – examine registration/search processes
- Run a Business Working Group
- Manage Business Agreements
Roles & responsibilities in a data steward group

Data Stewards:

Data Stewards come from several backgrounds/experience including Health Information Management, Registration, Application Administrator, Business Analysts:

- Inspect, work, and resolve tasks (enterprise linkages, review identifiers, custom tasks, etc.)
- Update source system records *(in certain special cases)*
- Manage relationships and hierarchies
- Support source system facilities in their task resolutions
- Run reports as requested
- Conduct user training
Roles & responsibilities in a data steward group

Systems Analysts:

Systems Analysts typically have a strong blend of business analysis and systems analysis skills and a solid knowledge of the HIM and H.I.E. business:

- Liaise with the Information Technology group translating Manager and Steward needs into functional and technical requirements
- Perform simple configuration changes to the H.I.E.
- Design and run new reports
- Design and document new processes
- Create custom tasks
- Collect statistics and key metrics for Managers
- Manage access and user groups
What are the tools for data stewardship?

- **InfoSphere MDM Inspector** – task tool for reviewing relationships, linkages, duplicates, custom tasks, etc.
- **InfoSphere MDM Workbench** – Sysadmin configuration, dictionaries, exporting data, etc.
- **InfoSphere MDM Web Reports**
- **Business Process Manager (BPM)** bundled in IBM InfoSphere MDM
Best Practices

- Don’t overthink it – get started
- And 80% IS good enough
- Avoid the analysis-paralysis people
Best Practices - Multiple Domains

A Data Steward Group may need to serve more than one master, so consider the representation and makeup of the group carefully.

**Desired Data (Beyond Demographics)**
- Next of Kin
- Emergency Contact
- Visit Numbers
- Provider Relationships
- VIP or Privacy Flags

**Clinical Domain Drivers**
- Unambiguous Client Identity Resolution (get the right patient when they present for care)
- Data Integrity (no duplicates or overlay conditions)
- Manage Clinical Risk (identify, suppress, and correct suspect records) – Register with what the patient has and be able to link and remediate later.
- Cross Enterprise View of a Patient (link all identities)

**Ministry Domain Drivers**
- Registration of Clients with a single Health Care Number
- Proof of a Client’s Identity via documentation (passport, etc)
- Validation of core Client Demographics (Gender, Name, DOB)
- Establishment of Eligibility for Health Services to Clients
- Citizen Registry
- Self Serve Kiosks

**Government Domain**
- Eligibility
- Other Insurance
- Family relationships – “household”
- Validated Death Date
Process to “stand-up” a Data Steward Group

1. Establish a business owner - communicate this to all stakeholders
   Define the governance accountabilities & job descriptions for a team
   Typically 1 month duration.

2. Hire key staff to create the team:
   1 Manager – HIM
   1 Manager - Registration
   1 Strong Analyst
   1 Data Steward

Successful data steward groups that promote excellence are usually led by managers that are well known to facility stakeholders, trusted, respected, and great facilitators.
The new data steward team must engage the HIE technical team EARLY IN THE PROJECT – it takes time to learn how HIE components like InfoSphere MDM work, what functionality it has, - the data steward team needs to be the subject matter expert.

Establishing the team 1-2 months prior to HIE initial configuration is typically recommended.
Create a data stewardship Business Working Group – representation from facilities across the enterprise – especially those who will go-live early on the HIE.

Representation from HIM & Registration groups of facilities

Ideal size is 10-12 people

Conduct education sessions (3-4) for the BWG on:

- EMPI, CDR, etc.
- Inspector for task resolution
- Active Integration – (foreign search)
- Web Reports
- Business Agreements
Process to “stand-up” a Data Steward Group

With the new data steward team and a functioning Business Working Group – engage the IT team and DRIVE the requirements and configuration decisions.

Take issues back to the Business Working Group when necessary – keep them engaged and “in the canoe”.

Consult & discuss key decisions

Drive requirements & configuration decisions

Business Working Group

Data Steward Team

The IT folks
Process to “stand-up” a Data Steward Group

6
Start looking at the data – load and run analytics, profile data sources, – goal is to understand the data and start making deployment and configuration decisions.

7
Build a Business Process Manual with the BWG – “How will we do task x, how will we harmonize process y?”

Create a Business Agreement or Memorandum of Understanding for stakeholders participating in the HIE – manage the agreement
What is typical in a Data Stewardship MOU?

1. BACKGROUND ON THE HIE
2. PURPOSE FOR THE MOU
3. PARTICIPATING STAKEHOLDER ORGANIZATIONS
4. MINIMUM DATA SET (MANDATORY to send for creating a record)
5. CORE DATA SET (full data set to share with the HIE)
6. SOURCE OF TRUTH MODEL (business rules in sharing this data)
7. OPERATIONAL SERVICES PROVIDED BY THE STEWARD GROUP
   – LISTED AND REFERENCED TO THE BUSINESS PROCESS MANUAL
8. OPERATIONAL SERVICES PROVIDED BY STAKEHOLDER ORG
   – LISTED AND REFERENCED TO THE BUSINESS PROCESS MANUAL
9. REPORTS PROVIDED
10. PRIVACY & CONFIDENTIALITY
11. ACCESS REQUESTS
12. INAPPROPRIATE USE POLICY & PROCESS
13. SUPPORT
QUESTIONS?