Population Health Information Tool
PHIT
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ACENDIO

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Population Health Information Tool

- PHNs in LHO Dublin North Central
- Funded by HSE and the NCNM
- Launched by the HSE (2011).
- In 2012 a pilot project funded by the ICHN
  - Test digital data entry of PHIT
  - Create business case for e.version of PHIT
Public Health Nursing in Ireland

Key Role

• Identify individual and population need through a continuous system of registration and analysis

• Case Finding Surveillance & Analysis
Background to PHIT

• Existing project developed with practitioners based on requirements over 4 years
• Developing a pragmatic tool for population health data collection within public health nursing
PHIT Data Life Cycle

1 Patient Registration
- Evidence based assessment
  - Family Health
  - Chronic Sick/Disability
  - Older Adults Care
  - Acute Care

2 Coding
- Geography & Caseload
- Self Care ability
- Health Need
- Primary care
- Referral and team working

3 Caseload Analysis
- Health Needs Assessment
- Caseload Management
- Governance/Supervision

4 Comparison
- With Census etc.
  - Provides link to wider epidemiological framework
  - KPIs
  - PC resourcing
  - Audit/upgrade
Structure & Framework

- Care Plan / Assessment
- Medication / Tx
- Status Active / Inactive
- Care Plan Interventions / Evaluation
- HC Continuation Sheet
- Register Templates
- Quarterly & Annual Summaries
- Reports, Views & Summaries
Quarterly & Annual Summaries

Provide Information on:

- Acute and chronic care need
- Family Health Outcomes
- Performance Indicators
- Case Review Rate
- Case Dependency Rate
- Geographic Caseload Composition & Need
- Population Health
Some Examples of Reports
Register 1 Family Health
2,000 approx. New Births Annually
15% received outside 48 hour PI and Low Birth Weight Average 5.7%

Low Birth Weight (less than 2.5Kgs) 4th Quarter 2011 DNC

<table>
<thead>
<tr>
<th>Location</th>
<th>Series1</th>
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<tbody>
<tr>
<td>Summerhill</td>
<td>4.20%</td>
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<tr>
<td>North Strand</td>
<td>10%</td>
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<tr>
<td>North Clarence St</td>
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<tr>
<td>Eastwall</td>
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<tr>
<td>Millmount</td>
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<tr>
<td>Ballymun</td>
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<tr>
<td>Marino</td>
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<tr>
<td>Larkhill</td>
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<tr>
<td>Killester</td>
<td>3%</td>
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<tr>
<td>Vernon Avenue</td>
<td>2%</td>
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Register 2 Annual Outcomes Chronic Sick / Disability

- 430 new patients annually with total 1,504 on Register most likely to be between 45 and 64 years of age
- Highest incidence in Network 1 and 2 reflecting demographic profile
- Most frequent diagnosis: mental health, neurological disease, chronic wound care
- Significantly higher smoking rates
- Average continuing care need = 5 years
Register 3: Older Adults

893 new Older Adults per annum with Total 6,307 on Register
8% with high dependency needs (suitable for SAT assessment)

<table>
<thead>
<tr>
<th>Dependency Reg 3, 4 Qs 2011 DNC</th>
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<tbody>
<tr>
<td>1st Q</td>
</tr>
<tr>
<td>Health Promotion</td>
</tr>
<tr>
<td>Acute</td>
</tr>
<tr>
<td>Chronic Stable</td>
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<td>Chronic Complex</td>
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Register 4: Acute Care

- 3,601 Acute Care Episodes
- 69% are Older Adults
- Most having need for wound care
- Most referred from acute services
- 50% continuing to chronic care need
- 76% of those continuing are 65 years+ with co-morbidity
Nursing Treatments (Interventions)

19,282 nursing treatments recorded in 2011

‘Setting Up’ home care most frequently recorded followed by:

- Wound Care
- Medication
- Continence
- Nutrition Management
Project Aims

Pilot Phase Aim: Proof of Concept

1. To pilot a digital version of the PHIT using a digital pen as a vehicle for data collection.

2. To deliver point of care nursing documentation without duplication or transcription having a positive impact on time management and co-ordination of care.

3. To ensure that future electronic versions of PHIT are designed in accordance with integrated services framework:
   - Data dictionary with associated clinical reference terminology codes
   - Adoption of Harmonised standards used to define information and data models
   - High level business case with value proposition articulated
Pilot Project Activities 2012 – Phase 1

Pilot : Proof of Concept digital data entry
1. Development and use of templates using digital pen
2. Pre-testing in clinical simulation laboratory
3. Liaising with HSE on network access and data storage
4. Training small number of staff for pilot data collection
5. Addressing governance and data protection issues.
Pilot Project Phase 2

Phase 2 : Health Informatics Development

1. Select preferred standards for development of phase one and two
   – EN12967 HISA
   – EN13940 Contsys
   – ISO 13606 / HL7 version 2.4
2. Develop business case with HSE ICT for regional/national roll out
3. Consultation and communication with key stakeholders
4. Identify core requirements to realise integrated solution of electronic PHIT in the future
5. Identify champions for executive sponsorship
6. Report back on initial pilot study
Nursing Informatics Landscape
Big Picture Ecosystem Roadmap

- Transatlantic eHealth Roadmap
- ACENDIO HISINM
- eHealth Summit May 2013
Challenges Encountered?

- Socio Political
- Technical
- Readiness

Proactive versus Reactive
Leadership in Nursing & Midwifery

Some personal reflections

• HISINM New Strategic Plan
• Readiness for engagement a key priority

Culture Eats Strategy for Breakfast
eHealth, EHR & Interoperability

- First steps in this process of development is design for interoperability
Interoperability Requirements

Socio
- Political
- Organisational
- Legal
- Economic

Technical
- Architecture
- Processes
- Structures
- Semantics

Interdependent Relationships Kay S, 2012
PHIT & Interoperability

- **Socio**
  - Business case
  - Political consensus
  - Unique Health ID

- **Technical**
  - Agreed concepts (PHIT)
  - Data Dictionary
  - Data, Information & Clinical process models

- **Readiness**
  - Training
  - Education
  - Governance

*Green = Significant work completed Orange = Started Black =Awaiting Decisions*
Data Dictionary

Will not be done until Ireland has acquired a license from IHTSDO
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