Clinicians driving clinical dashboards:
Making best use of data across boundaries
(integrating urgent care management)

Dr Anne Talbot,
National Clinical Lead, Urgent Care Clinical Clinical Dashboard
Overview of the Urgent Care Clinical Dashboard

Identified benefits in the pilot dashboard site and developments in pioneer sites

How can dashboards support reduction in variation in primary care?
What is wrong with urgent care?
Good quality information is a driver of performance for clinical teams and helps ensure the best possible care for patients.

Clinical dashboards help to drive this process by:

- providing **timely, relevant information** for clinical teams, as **real-time** as possible and presented in easy to understand formats, with high visual impact
- utilising **multiple sources of existing data**, even across organisational boundaries and providing information for use across **multidisciplinary teams**
- allowing **flexibility for local configuration** and comparison against national data sets and permitting **regular changes** to displays as is locally relevant
The Urgent Care Clinical Dashboard concept

• Provides real-time information from local acute trust on A&E attendances, admissions and discharges combined with real-time information from out-of-hours and the walk-in centre to each GP practice.

• Displayed in a graphical, user-friendly way to help practices to manage and co-ordinate patients’ health care more proactively, especially for the most vulnerable patients and those with long-term conditions.

• Doesn’t contain any more information than the practice already receives, but presents the information in a timely way, displaying all of the information together to present a more complete picture.
Information received separately from multiple sources within different time frames – making identifying patterns difficult
Integration of information from multiple source systems

Clinical Dashboard:
Patient Drilldown - PatientK

<table>
<thead>
<tr>
<th>Service</th>
<th>Attendance Date</th>
<th>Register?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information From Acute Trust

**A&E**
- Patient: PatientA, Attendance Date: 01/02/2009
- Patient: PatientF, Attendance Date: 01/02/2009
- Patient: PatientK, Attendance Date: 03/02/2009
- Patient: PatientJ, Attendance Date: 04/02/2009
- Patient: PatientM, Attendance Date: 03/02/2009
- Patient: PatientK, Attendance Date: 08/02/2009

**Admission**
- Patient: PatientA, Admission Date: 01/02/2009
- Patient: PatientK, Admission Date: 08/02/2009
- Patient: PatientH, Admission Date: 04/02/2009

**Discharge**
- Patient: PatientA, Discharge Date: 08/02/2009
- Patient: PatientK, Discharge Date: 08/02/2009

Practice Disease Register
- Patient: PatientT, Register: Diabetes
- Patient: PatientK, Register: COPD
- Patient: PatientS, Register: CHD

WiC
- Patient: PatientM, Attendance Date: 01/02/2009
- Patient: PatientF, Attendance Date: 01/02/2009
- Patient: PatientJ, Attendance Date: 02/02/2009
- Patient: PatientM, Attendance Date: 03/02/2009
- Patient: PatientJ, Attendance Date: 04/02/2009
- Patient: PatientK, Attendance Date: 02/02/2009

OOH
- Patient: PatientT, Contact Date: 01/02/2009
- Patient: PatientY, Contact Date: 01/02/2009
- Patient: PatientJ, Contact Date: 02/02/2009
- Patient: PatientK, Contact Date: 03/02/2009
- Patient: PatientM, Contact Date: 03/02/2009
- Patient: PatientJ, Contact Date: 04/02/2009
Enables GPs, nurses and active case managers to monitor their own patients' recent attendances at A&E and out-of-hours services, and to highlight which of these patients are on disease registers.
### Urgent Contacts - 30 day rolling report

Press Ctrl + F to search

The Practice you have selected is: Test Practice

<table>
<thead>
<tr>
<th>NHS Number</th>
<th>Patient Name</th>
<th>Contact Date</th>
<th>Contact Type</th>
<th>Admission Type</th>
<th>Person Age</th>
<th>Freq. (Single service within 30 days)</th>
<th>Freq. (Any service within 30 days)</th>
<th>Disease Register</th>
<th>Disease Register</th>
<th>Disease Register</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>02/03/2011</td>
<td>Out of Hours</td>
<td>Home Visit</td>
<td>90</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>02/03/2011</td>
<td>Out of Hours</td>
<td>Home Visit</td>
<td>83</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>02/03/2011</td>
<td>Out of Hours</td>
<td>Home Visit</td>
<td>90</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>02/03/2011</td>
<td>Out of Hours</td>
<td>Home Visit</td>
<td>83</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>02/03/2011</td>
<td>Out of Hours</td>
<td>Advice</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>02/03/2011</td>
<td>Out of Hours</td>
<td>Advice</td>
<td>45</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Urgent Contacts - No Time Limit

<table>
<thead>
<tr>
<th>Practice</th>
<th>Date of Contact</th>
<th>Discharged</th>
<th>Contact Type</th>
<th>NHS Number</th>
<th>Patients Name</th>
<th>D.o.B.</th>
<th>Post Code</th>
<th>Symptoms</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P62xxx</td>
<td>29/02/2009 12:25</td>
<td></td>
<td>WC</td>
<td></td>
<td>Surname, Forename</td>
<td></td>
<td></td>
<td></td>
<td>Contact Own GP/AE If No Improvement -</td>
</tr>
<tr>
<td>P62xxx</td>
<td>29/02/2009 08:37</td>
<td></td>
<td>Nurse Advice</td>
<td></td>
<td>Surname, Forename</td>
<td></td>
<td></td>
<td>cold like symptoms and earache</td>
<td>Referred To Walk In Centre -</td>
</tr>
</tbody>
</table>
Individual patient level

Practice operational level – identifies issues of primary care access

PCT operational level – identifies poor patient pathways, areas of training need across professional groups

PCT strategic level – tool linked to strategic aims, objectives and plans; public media campaign

NHS Bolton achieved a reduction in A&E attendance of 3.14% and a reduction in non-elective admissions of 4.19% over 12 months, equating to an efficiency saving of > £600,000
Pioneer and Pioneer Associate Sites

KEY
Pioneer site live
Pioneer site scheduled to go live by Oct 2011
Pioneer associate site live
Pioneer associate site scheduled to go live by Oct 2011

South Cheshire and Vale Royal GP Commissioning Consortia
NHS Central Lancashire
NHS Liverpool
NHS Manchester

NHS Stoke on Trent and NHS North Staffordshire

NHS Devon

NHS Oxfordshire
NHS Southampton

NHS Tees
NHS Gateshead

NE Lincolnshire Care Trust Plus / NHS North Lincolnshire / North Lincolnshire & Goole Hospitals NHS Foundation Trust

NHS Northamptonshire

NHS Cambridgeshire
NHS Luton
NHS North East

Central London Healthcare Partnership
Newham Health Partnership / Newham Commissioning Group

NHS Brighton and Hove
Local innovations

• **Risk profiling/stratification** – incorporated in NHS Devon and NHS Brighton and Hove dashboards. Advanced predictive risk modelling data flags up patients at higher risk of further admissions, joining up information relevant to urgent care and long-term conditions work.

• **Urgent care attendances by time** – NHS Tees displays attendances at urgent care settings by two-hour time bands, showing demand levels and also potentially picking up inappropriate attendances.

• **Variance** – NHS Devon highlights practice activity levels compared to their consortia average and variance over time.
Pioneer developments: NHS Devon
Dashboard-enabled change

A&E Attendances at Royal Bolton Hospital between 1st April 2008 and 28th February 2011
Bolton Community Practice (data from individual practices pre-integration have been merged)

Dashboard-enabled change (cont.)

July 2010 - Integrated practice commenced triage using dashboard

Mean, upper limit and lower limit recalculated where special cause variation identified
Promoting good variation: minimising bad
Promoting good variation: minimising bad
Promoting good variation: minimising bad
95% of urgent care is accessed in primary care with 5% in secondary care.

As a result a 1% increase in primary care causes a 20% decrease in secondary care.

*Dr Jay Banerjee, University Hospital of Leicester*