Electronic Medical Record Panel Discussion
Panel Members

➢ Winda Antoine, Manager of Information Systems
  Memorial Hermann Healthcare System

➢ Linda Justice RN MCSM, MIDAS+ System Manager
  Spartanburg Regional Healthcare System

➢ Wendell Pritzel, System Support Specialist
  Maury Regional Healthcare System

➢ Betsy Stauffer MCSM CPHQ RHIT,
  MIDAS+/DataVision System Administrator
  Lancaster General
Hospital Information Systems

MCKESSON
Empowering Healthcare

CERNER

EpicCare Inpatient

MEDITECH
Your Connection to Better Health Care
MIDAS+ DataVision:
Retrospective comparative data and
JCAHO/CMS Reporting

MIDAS+ Seeker: Credentialing and Provider Profiling

MIDAS+ Care Management
Case Management
Quality Management
Risk Management
Reporting/Performance Management

EMR or Paper Equivalent

Laboratory, Pharmacy, Radiology, Orders, Nursing
Assessments . . .

Hospital Information System: Administrative Data including UB92 (UB04)

Admission ----------------- Patient ------------------- Discharge
Memorial Hermann Fact Sheet

- 10 Acute Hospitals
- 3200+ Licensed Beds
- 3 Long-Term Care Facilities
- 3 Specialty Hospitals
- 1 Home Health Agency
- 20 Regional Affiliates
- 27 Sports Med & Rehab Centers
- Affiliation with University of Texas Medical School at Houston

- 4,194 Medical Staff
- 1,324 Physicians in Training
- 18,871 Employees
- 125,511 Admissions
- 524,671 Outpatient Visits
- 323,258 Emergency Visits
- 25,000 Deliveries
- 3,239 Air Ambulance Missions
ISD Factoids as of January 2007

- 2 data centers, 1 mainframe, over 300 applications in production, 56 Unix/VMS servers, 770 Intel Servers
- 19,430 devices connected to the enterprise network
- 13,242 PCs and laptops, 858 COWS, 4,072 printers, 362 scanners, 73 terminals, 368 Blackberries and 455 PDAs
- 27,500 phones, 5,850 pagers, 1,200 Spectralink phones
- 91 formal projects engaged and underway
- 17,369 EMR users monthly with 2,942 being MDs
- 238,000 sessions per month on www.memorialhermann.org
- 18,000+ Exchange email user accounts
- 300+ applications supported by ISD
- 15,000 monthly calls to the ISD Support Center
- 323 FTEs in ISD and another 67 located in the Hospitals
Develop a **system-wide, consistent approach** to patient care, providing healthcare professionals with information, resources and processes that **facilitate** optimal, efficient clinical decision-making.

1. Right **care**, at the
2. Right **time and place**, with the
3. Right **resources**, and with the
4. Right **information**.
When EMR and When MIDAS+

• EMRs
  – Proactive, concurrent care management tool
  – Provides ability to prevent occurrences by sending alerts and reminders
  – Evidence based medicine resources assist with optimal care giving

• MIDAS
  – Retrospective care management tool identifying where we missed the mark
  – Provides ability to readily show specific improvement opportunities
Example

Making a DRG work in the Concurrent, Proactive Sense
Setting the Stage - Terms We Use

• **Working DRG** – that DRG associated with the diagnostic condition of a patient during their inpatient stay. Based on testing and changes in the patient’s health, this DRG is dynamically updated throughout a patient’s stay.

• **Estimated Discharge Date** – the date the patient is expected to leave the hospital based on the patient’s condition, co-morbidities, doctor assessments and Case Manager’s best judgment.

• **Estimated Length of Stay** – the number of days a patient is anticipated to be in their inpatient setting based on their condition and co-morbidities.

• **Target Discharge Date** – the calculated date associated with a DRG for which the patient is expected to leave the hospital based on Solucient’s 25th percentile length of stay.
What Can a Working DRG Provide

• Our research showed communicating the primary condition of an inpatient and the estimated length of their stay in the hospital is needed to efficiently and effectively manage a patient’s discharge process.

• Sharing the working DRG, estimated LOS and expected discharge date between the Patient Management, Case Management and Cerner systems helps accomplish the above goal.
Change Taking Place

• **Old Way…..**
  – Patient Diagnosed with DRG of Congestive Heart Failure Only
    • Target LOS – 5 Days
    • Target Discharge Date if Admitted Today
      – Admitted on 6/04/2007
      – Target Discharge on 6/09/2007

• **Improved Way…..**
  – Patient with DRG for Congestive Heart Failure and Co-Morbidities
    • Target LOS – 5 Days
    • Estimated LOS – 10 Days
    • Estimated Discharge Date if Admitted Today
      – Admitted on 6/04/2007
      – Estimated Discharge Date with Co-Morbidities Equals 6/14/2007
How Does the Process Work

Working DRG Functional Process Flow

As of 10/21/2005

**Initial DRG Entry – HQ & 3M**

| HQ – Registrant enters Initial working diagnosis | 3M Coder - Convert initial working diagnosis to DRG with estimated LOS | HQ – Receive updated DRG And estimated LOS |
| Link to 3M CodeFinder product interactively | | HL7 interface – send DG1 segment with Working DRG & estimated LOS |

Working diagnosis is selected from a table in HealthQuest at the time of admission.

**Subsequent DRG Entry – MIDAS+**

| MIDAS+ – Case Manager updates working DRG on UR Dx/Proc screen and working (UR) discharge date on UR Discharge Planning screen | | Cerner and MIDAS+ - receive working DRG and estimated LOS |
| | | Cerner stores data on Active Intervention screen. MIDAS+ stores data on UR Dx/Proc and extended user field. |

Working DRG is derived from working diagnosis. Estimated LOS associated with DRG is determined based on Solucient's 25th percentile. This will be provided Table containing this data is received from Care Management.

| Initial working DRG and LOS will be retained in MIDAS+ on the UR extended user screen | | Cerner – receive updated working DRG and estimated LOS |
| Clicking Save on UR Discharge Planning Entry screen will send 1 updated record containing the UR Concurrent Review Entry DRG and the UR Discharge Date | | |

16th Annual MIDAS+ User Symposium

June 4–6, 2007 • Tucson, Arizona
What’s the Process Outcome

1. Assess the patient’s condition, record, and assign a working DRG

2. Enter the working DRG into the Case Management system

3. Working DRG interfaced to registration and Cerner systems

4. Patient Banner updated in Cerner to reflect the estimated discharge date

5. Daily active intervention reminders on patient condition, working DRG and estimated LOS

Result: Enhanced Management of a Patient’s Stay
Patient’s Current Length of Stay

Focusing Attention on LOS

<table>
<thead>
<tr>
<th>Room</th>
<th>Bed</th>
<th>Sec</th>
<th>Note</th>
<th>VIP Code</th>
<th>Name</th>
<th>Age</th>
<th>Sex</th>
<th>MRN</th>
<th>Length of Stay</th>
<th>Attending Physician</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICU 01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TEST, HEID1 AM1D</td>
<td>54 years</td>
<td>Female</td>
<td>37012534</td>
<td>137.9 Days</td>
<td>Abaya, Bernardino F MD</td>
</tr>
</tbody>
</table>

As Of 7:46 AM  
LOCATION: Location List for Cullen 2 E Medical Int
What Can be Gained

• Benefits Hoped For...
  – Nurse Awareness of Estimated Discharge Date
  – Physician Awareness of Estimated Discharge Date
  – Patient Care Avoidable Delay Decreases
  – Enhanced Discharge Planning Communication Between Multidisciplinary Team Members
  – Better Preparedness to Anticipate Census and Staffing Needs
Constant reviews and dynamic updates of the working DRG and estimated discharge date.
Reporting Tools – Now and In the Future

• **Daily**
  – Active Interventions
  – Patient Banner

• **Every 2-3 Days**
  – Patient Chart Reviews and Assessments
  – Discussions with Physicians and Additional Caregivers
  – Dynamic Updating of Working DRG and Estimated Discharge Date

• **Weekly and Beyond**
  – Management Reports Showing Variances Between Estimated and Actual Discharge Date
  – Reports to Address Avoidable Delays in Providing Care
  – Leadership Reports Identifying Opportunities for Improvement
Thank You!

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- MIDAS+ Care Management installed in 1997
- Top 100 Most Wired Facilities for third year
- First JCAHO Certified Stroke Center in South Carolina
- First Certified Chest Pain Center in South Carolina
- First Magnet Nursing Facility in South Carolina
- First ISO 9001 Certified Lab in South Carolina
Lancaster General Hospital has received the prestigious designation as being a 100 Top Hospital eight of the last ten years. The hospital has also received special recognition for its orthopedics programs and outcomes, intensive care and cardiology services. Recently, the hospital received Magnet Hospital status, which is awarded after extensive review and evaluation by the American Nurses Credentialing Center.
Data Elements
In MIDAS+ & Other Systems

• Registration Information
• Discharge abstract
• Height/Weight
• Advanced Directives
• Race/Hispanic Ethnicity
• Smoker within past 12 months
• VIP Indicator
• Infant Weight/Apgars
MIDAS+ Applications
Not Suitable for EMR

• **Risk Management Module**
  – Incident Report Management
  – Patient Relations
    • Complaint/Compliment tracking
  – Post Discharge Phone Calls

• **Laboratory and Pathology**
  – Blood Usage Review
  – Pathology Classification Reporting
MIDAS+ Applications
Not Suitable for EMR (cont.)

• Hospital Case Management
  – Communication with Payors
  – Certification Detail
  – Denials
  – Social Work Interventions
  – Discharge Planning
MIDAS+ Applications

Not Suitable for EMR (cont.)

• Quality Module
  – Peer Review Activities
  – Quality Indicators
  – Tracking of Committee Reviews
  – Trending of Quality Events
  – Surgical Case Review
  – Performance Improvement Initiatives
  – Readmission Tracking
  – Physician Reappointment Profiles
  – Emergency Department Transfers
  – Emergency Department Returns
MIDAS+ Applications
Not Suitable for EMR (cont.)

• Regulatory/Other Agency Functions
  – JCAHO CMS Core Measure Reporting
  – AHRQ Indicators
  – Patient Safety Indicators
  – Reporting Risk Events to State
  – Medical Record Review

• Comparative Database Tracking / Drilldown
MIDAS+ Applications
Not Suitable for EMR (cont.)

- **Focus Module (databases)**
  - Smoking Cessation Program
  - Angiography Database
  - Service Recovery
  - Medical Outpatient Database
  - Breast Center Database
  - Disease Management
    - Diabetes Staged management
  - Process Focus
    - Surveys
    - Productivity monitors
MIDAS+ Applications
Not Suitable for EMR (cont.)

• **STW Notifications**
  – Risk Events
  – Readmission Notification
    • Patient Relations
    • VIP Status
    • Smoking Cessation Attempts
    • Previous Cardiology Intervention
    • Disease Specific Notifications
  – Date Sensitive Reminders
    • Radiology
    • Unresolved Complaints
• Data Quality Notifications
  – Incorrect Dispositions
  – Missing Birth Weights/Apgars
  – Coding Changes
  – State Mandated Infection Reporting
Document Imaging System (DIS)

Lifetime Clinical Record (LCR)

Ambulatory Electronic Medical Record (EMR)
Betsy Stauffer, MCSM, CPHQ, RHIT
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During planning for your EMR implementation were you asked to consider having specified MIDAS+ users begin using the EMR as a documentation or workflow tool?
What were the factors that helped you to determine which data collection/workflow tool to use?
What have been the outcomes, both positive and negative, of these decisions?
Questions from the Attendees