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Quality Analytic Services

American Hospital Association

Reducing Avoidable Obstetrical and Neonatal Readmissions

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Presentation Objectives

- Provide background on today's topic
- Present national data on perinatal readmissions from the NPIC/QAS Perinatal Center Data Base
- Present quality improvement initiative undertaken by Woman's Hospital/LA to address their readmission rate
- Discussion on your local initiatives

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Background

- 2008 CMS announced initiative to reduce hospital readmissions;
- CMS identified the adult readmission rate (Medicare patients) to be approximately 18%
- MCH Governing Council (March, 2009) looked at preliminary data regarding maternal readmissions; rates significantly lower ~ 1-2 %
- Recognized difficulty in tracking readmissions to non-delivered/ non-birth hospitals
- Current presentation is an update/expansion of 2009 discussion

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Classifications of Readmissions

	Related to Initial Admission	Unrelated to Initial Admission
Planned Readmission	A **planned** readmission for which the reason for readmission is **related** to the reason for the initial admission.	A **planned** readmission for which the reason for the readmission is **not related** to the reason for the initial admission.
Unplanned Readmission	An **unplanned** readmission for which the reason for the readmission is **related** to the reason for the initial admission.	An **unplanned** readmission for which the reason for the readmission is **not related** to the reason for the initial admission.

"…public policy efforts aimed at reducing readmissions should begin by identifying and focusing on the group of unplanned, related readmissions for which the greatest opportunity exists for hospitals to take actions that may prevent the occurrence of readmissions." MCH Governing Council Meeting Materials, March, 2009

Data Set: NPIC/QAS Trend Data Base

- 41 NPIC/QAS member hospitals who have been members since at least 2005
- Data analyzed: CY 2005- 2009; Q1-Q3, 2010
- 1,179,719 Total deliveries (over 5.75 years)
- 11,351 Total maternal readmissions
- 1,202,744 Total inborns
- 12,029 Total inborn readmits
- Calculation of percent change 2005-2009
- Significant upward, downward or stable trend

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Delivery Readmission Trends*

(2005-2009)

	2005	2009	Percent change 2005-2009
Average total deliveries	**5,006**	**4,882**	**-2.5%**
Readmissions as a percent of total deliveries	**.9%**	**1.0%**	**11.1%**
ALOS- readmissions	**3.0**	**2.9**	**-3.3%**
Ave. Charge-readmissions	**$9,799**	**$13,406**	**36.8%**
Readmissions originally delivered by c-section	**52.9%**	**54.2%**	**2.5%**

*** Delivered women, discharged to home, readmitted within 42 days for a postpartum condition**

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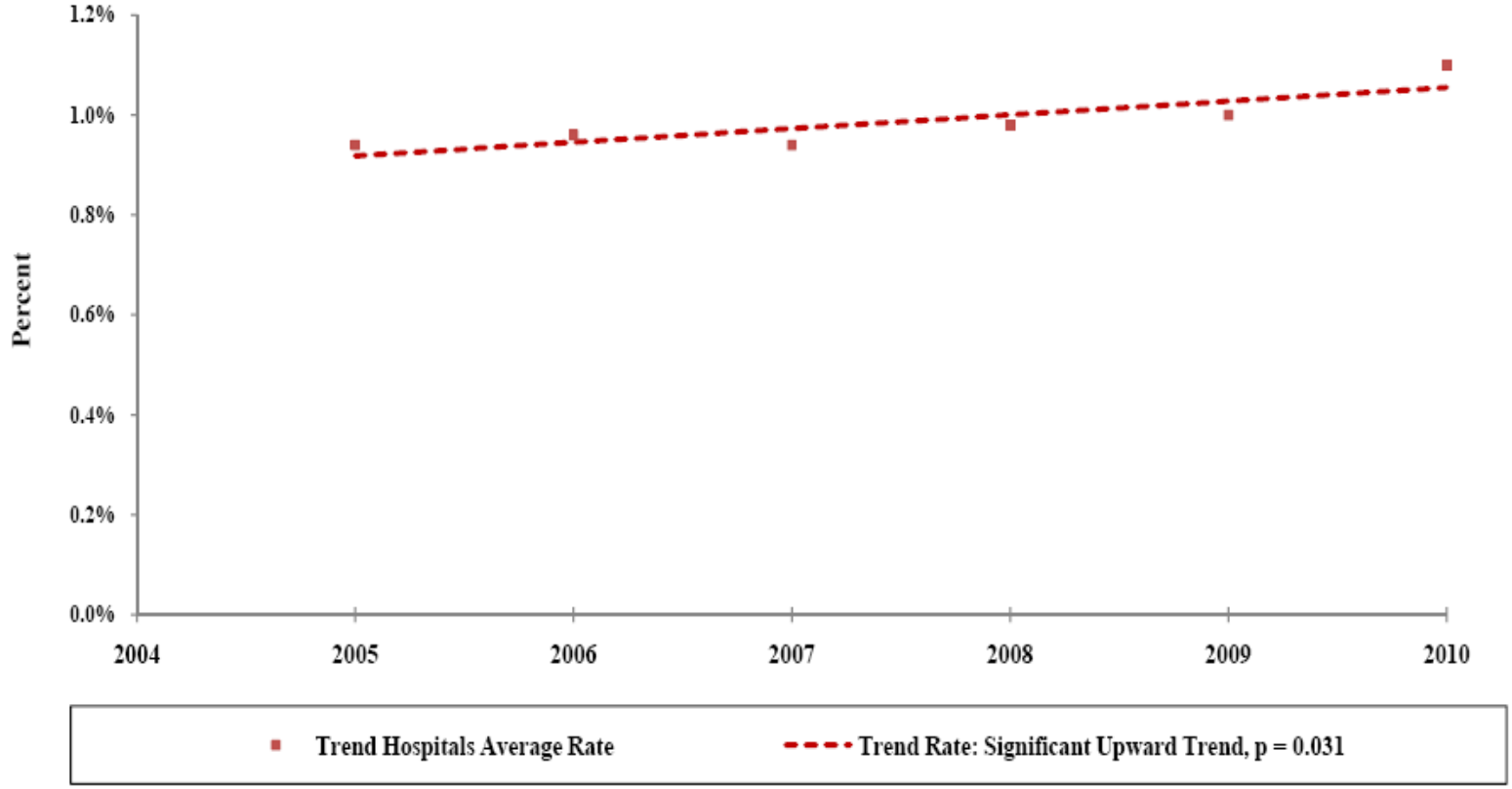
Graph 1: Perinatal Re-admission Analysis
Total Deliveries re-admitted within 42 days for post-partum condition as a percent of total deliveries
2005-2010 (Q1-Q3) with Trendlines



	2005	2006	2007	2008	2009	2010 (Q1-Q3)
Trend Rate	0.9%	1.0%	0.9%	1.0%	1.0%	1.1%

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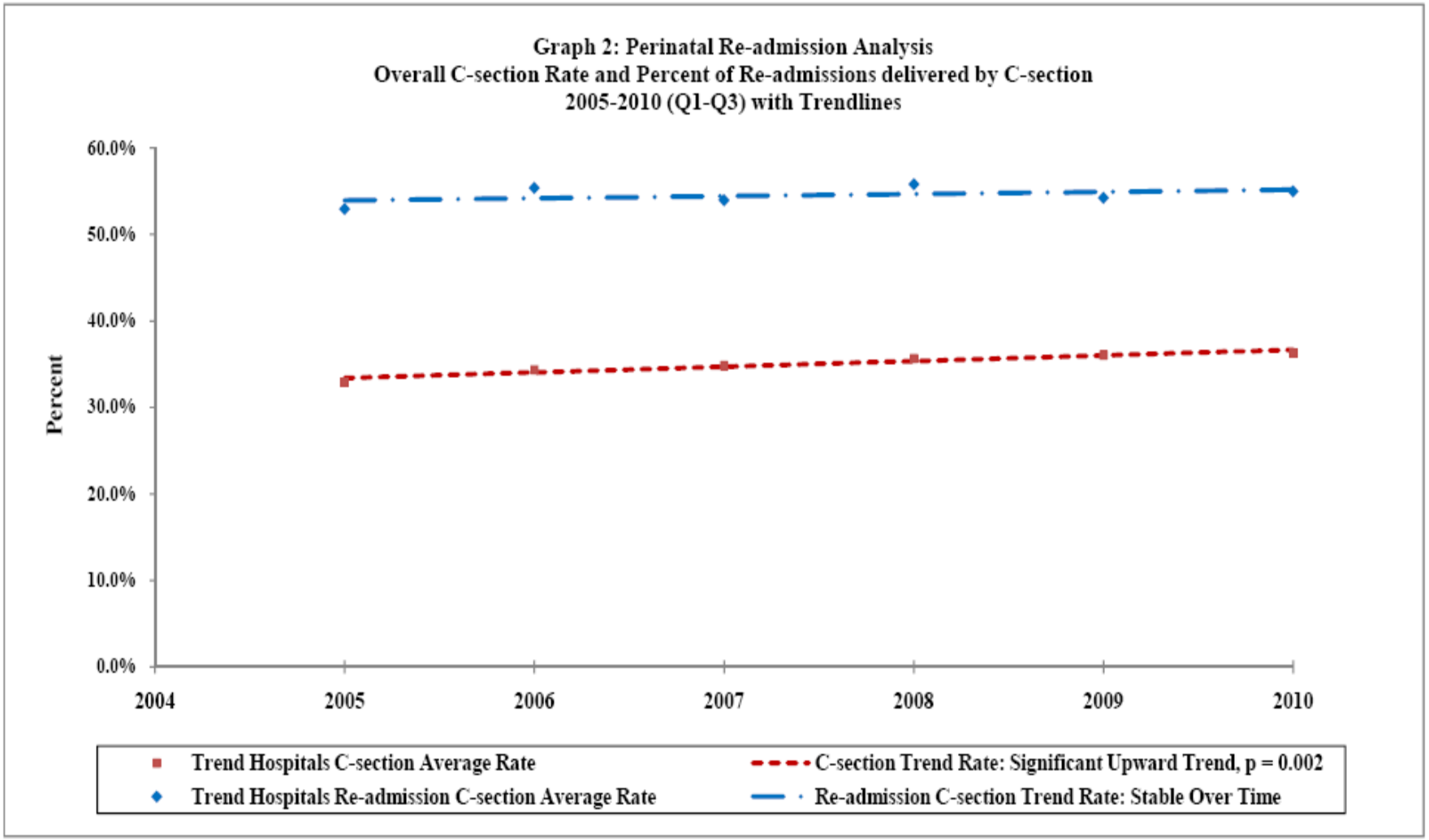

	2005	2006	2007	2008	2009	2010 (Q1-Q3)
Trend C-section Rate	32.9%	34.4%	34.9%	35.7%	36.0%	36.3%
Trend Readmission C-section Rate	52.9%	55.4%	54.0%	55.8%	54.2%	55.0%

Top 8 Principal Dx Codes for Delivery Readmissions (2005- 2009)

DX Code	Percent of total 2005	Percent of total 2009	Percent change 2005-2009
642.x4 Hypertension	21.0%	27.0%	28.6%
670.04 Major puerperal infection	19.3%	15.9%	-17.6%
674.34 Other complications of OB surgical wounds	12.6%	12.0%	-4.8%
646.64 Genitourinary tract infection	7.0%	6.5%	-7.1%
675.24 Nonpurulent Mastitis	5.7%	4.0%	-29.8%
648.94 Other conditions classified elsewhere	4.0%	4.9%	22.5%
674.84 Puerperal complication	4.0%	4.0%	0.0%
648.64 Cardiovascular disease NEC- postpartum	2.1%	1.2%	-42.9%

Delivery Readmissions with Coded Obesity* at Delivery

Year	Rate	Percent Change 2007-2010 (Q1-Q3)
2007	6.9%	
2008	6.2%	
2009	7.8%	
Q1-Q3, 2010	9.0%	30.4%

Obesity code introduced in Oct, 2006 649.1x

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Inborn* Readmission Trends

	2005	2009	Percent Change 2005- 2009
Ave number of inborns discharged to home	**4,951**	**4,933**	**-.04%**
Percent inborns readmitted within 28 days	**1.2%**	**1.1%**	**-8.3%**
Readmission ALOS	**3.1**	**3.3**	**7.2%**
Readmission Ave. Charge	**$7,036**	**$14,247**	**102.5%**

***Includes only Inborns discharged to home**

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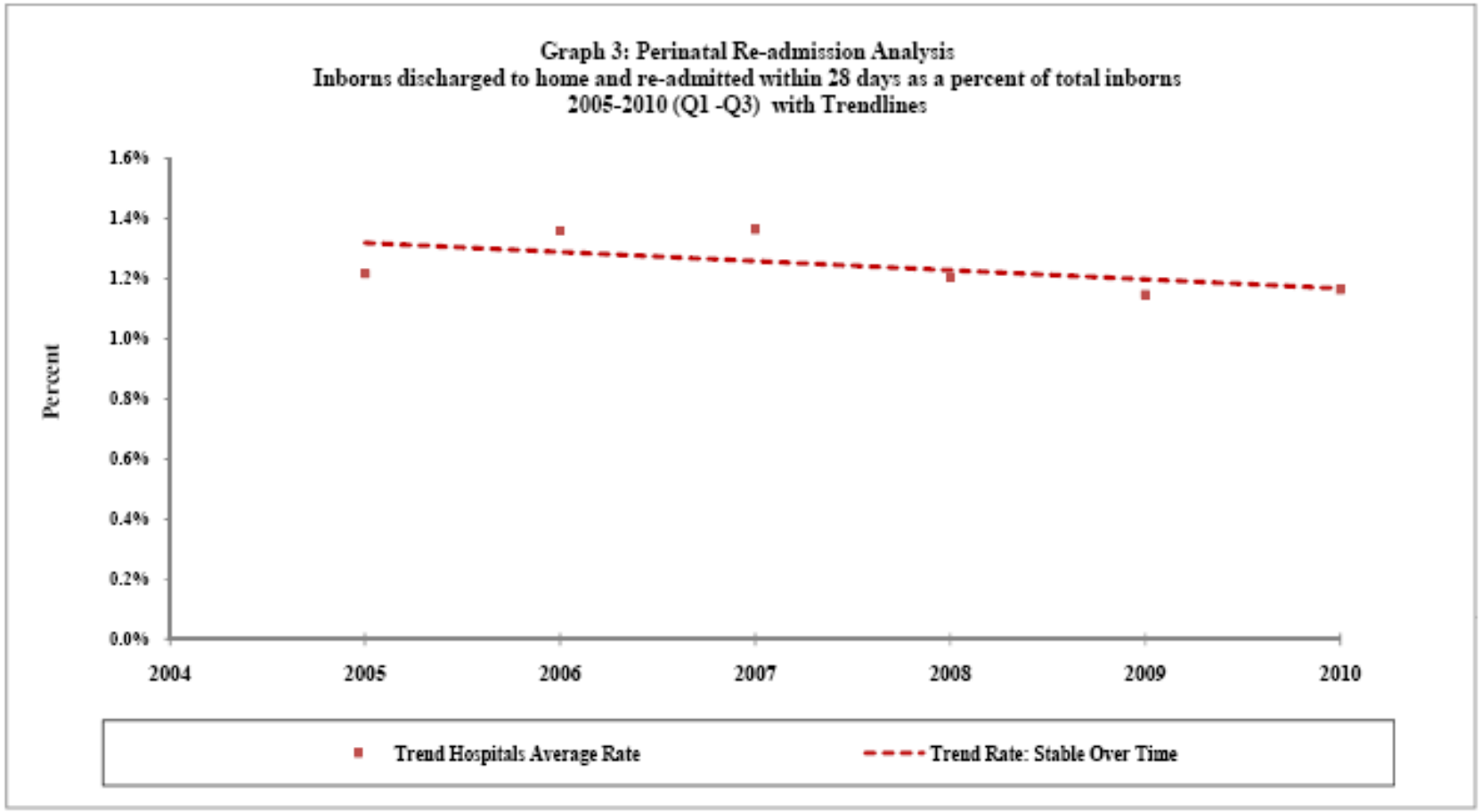

	2005	2006	2007	2008	2009	2010 (Q1 -Q3)
Trend Rate	1.2%	1.4%	1.4%	1.2%	1.1%	1.2%

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Top 8 Principal Dx Codes for Inborn Readmissions (2005- 2009)

DX Code	Percent of total 2005	Percent of total 2009	Percent change 2005-2009
774.xx Jaundice	40.1%	47.7%	17.2%
778.4 Other disturbances of temp. regulation	3.8%	5.3%	39.5%
780.6x Fever	3.3%	.7%	-78.8%
530.81 Esophageal Reflux	3.0%	.7%	-76.7%
466.11 Acute broncholitis D/T/RSV	2.9%	2.4%	-17.2%
779.89 Other specified conditions originating in the perinatal period	2.6%	8.7%	234.6%
773.1 Hemolytic disease due to ABO isoimmunization	2.3%	2.3%	0.0%
750.5 Congenital hypertrophic pyloric stenosis	2.2%	1.9%	-13.6%

Case study- Woman's Hospital Baton Rouge
QI Project to Reduce Readmissions

Project Driver:

- Hospital readmissions under close scrutiny by payers and policymakers – potential for high savings
- Avoidable readmissions increasingly viewed as a quality issue with payers, health care organizations and patients
- Not all readmissions are preventable
- Address issue of potentially avoidable readmissions

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Woman's Hospital
Baton Rouge, LA

- Tertiary Perinatal Center:
  - 8000 births/year
  - 12,000 adult admissions/year
  - 900 NICU admissions/year
- Scope of service:
  - Obstetrics
  - Gynecology
  - Gynecology/Oncology
  - Breast and general surgery
  - Neonatal Intensive Care

AHA Steps to Reduce Avoidable Readmissions

1. Examine hospital's current rate of readmissions
2. Assess and prioritize improvement opportunities
3. Develop action plan of strategies to implement
4. Monitor hospital's progress

Source: AHA "Health Care Leader Action Guide to Reducing Avoidable Readmissions", AHA/HRET, January 2010"
www.hret.org/care/projects/guide-to-reduce-readmissions

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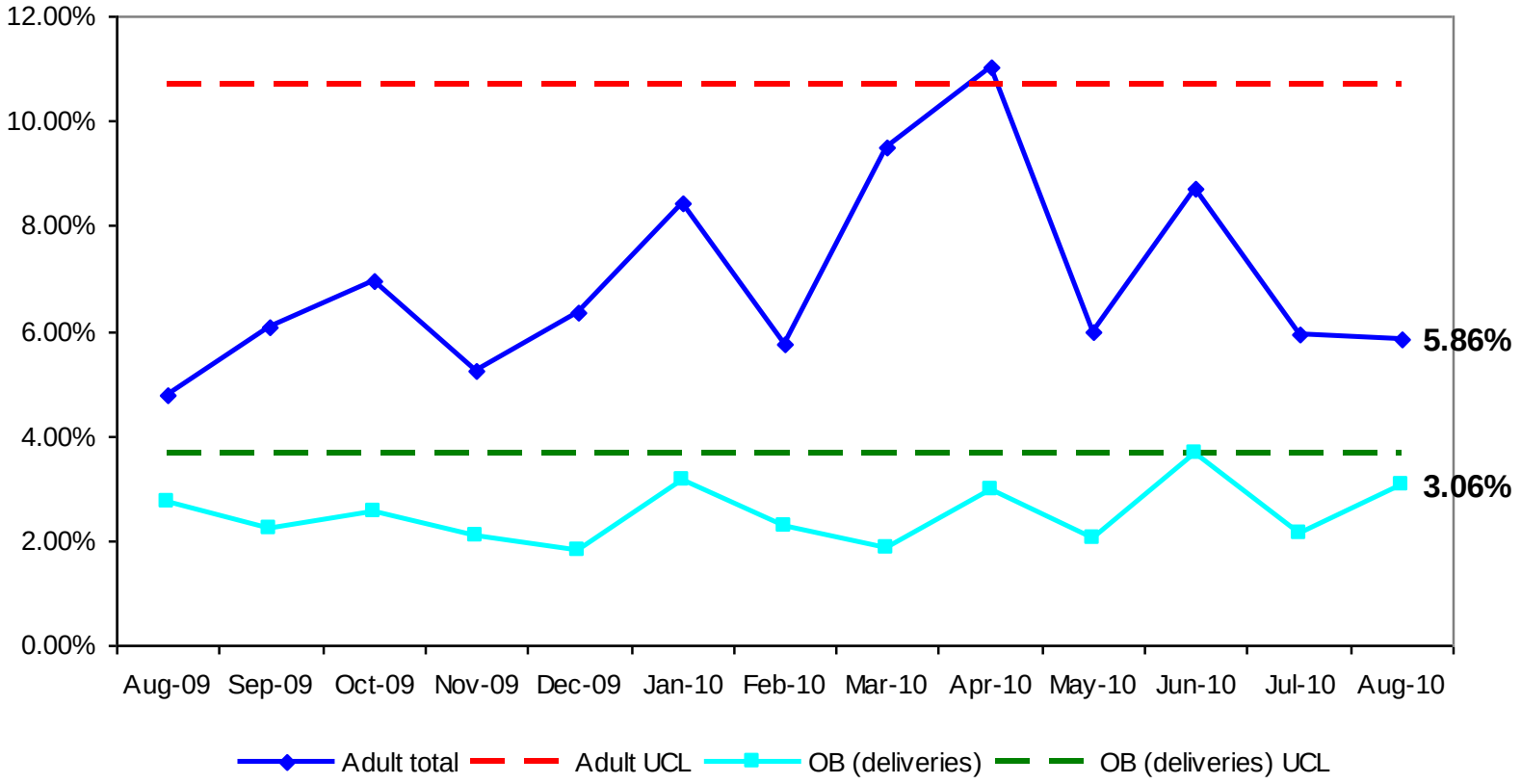
Readmissions Within 30 Days



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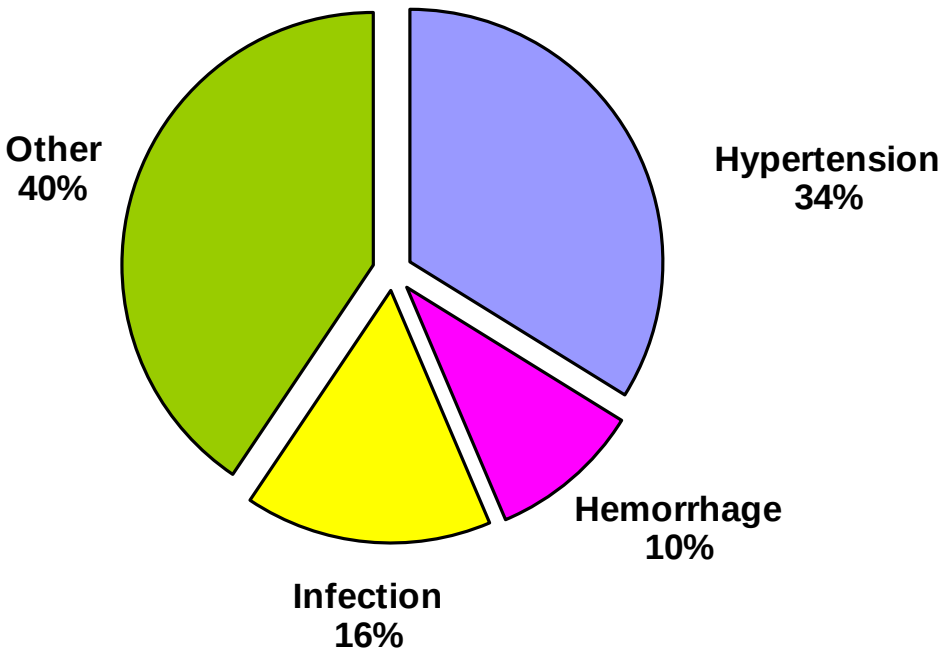
Postpartal Readmits



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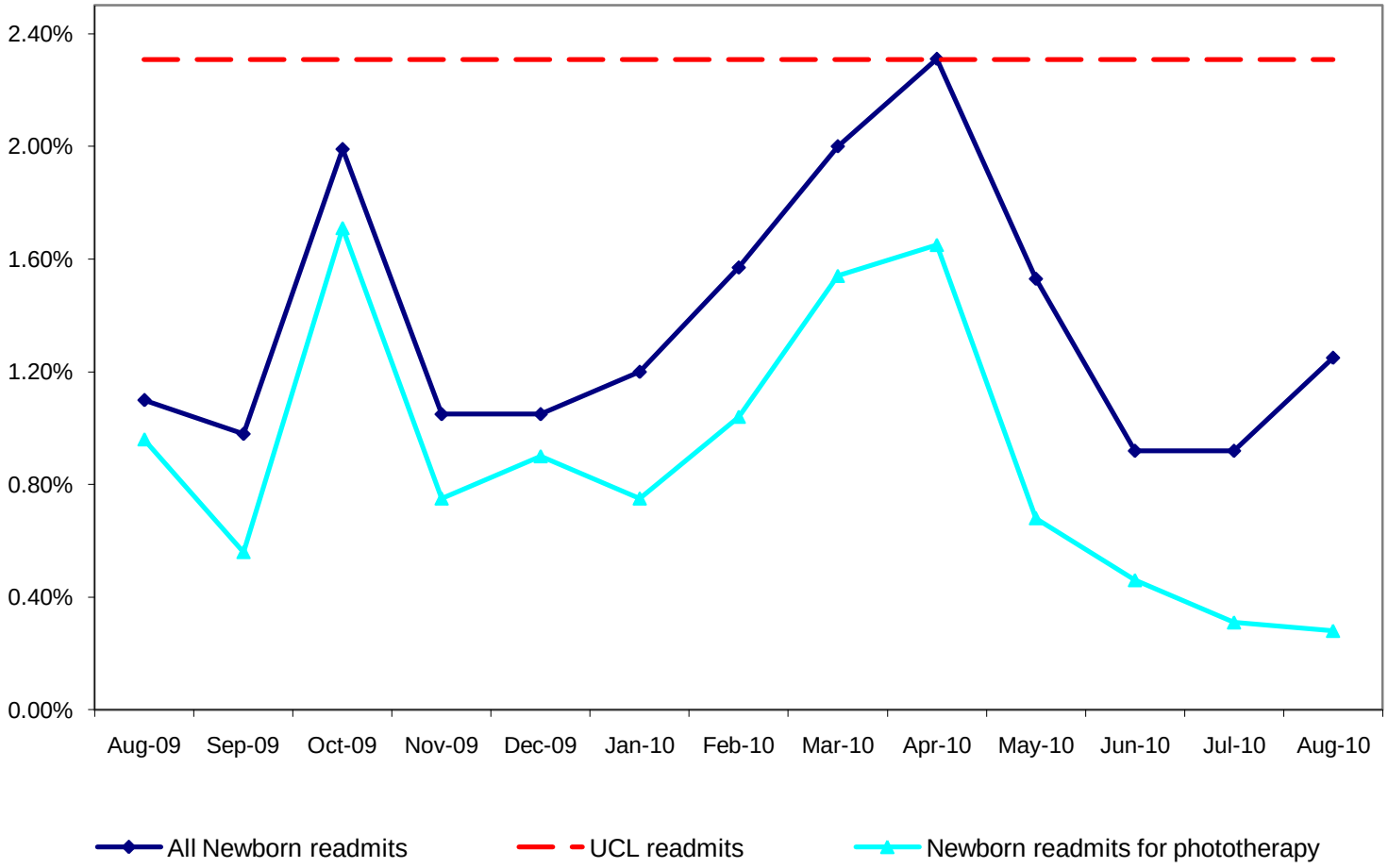
Postpartal Readmits

- 34% readmitted for hypertension
- 10% readmitted for hemorrhage
- 16% readmitted for pyelonephritis, genitourinary infections

Newborn Readmits (% of deliveries)



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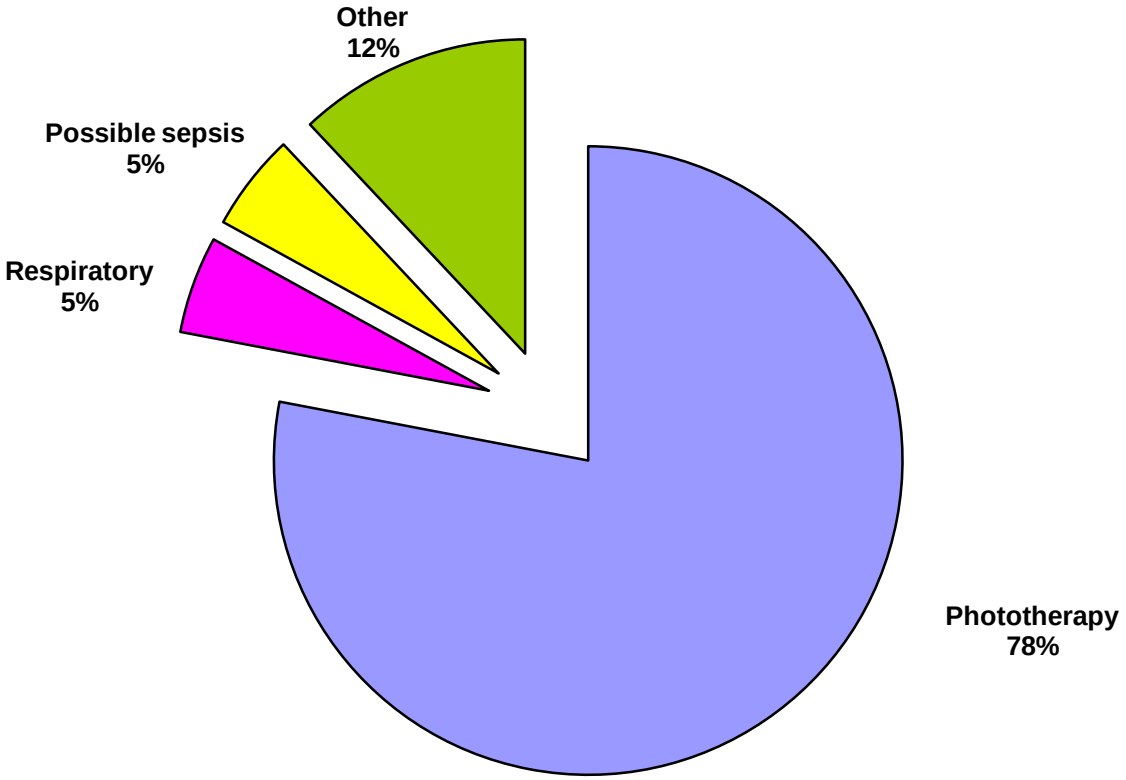
Newborn Readmits



Major Strategies to Reduce Avoidable Readmission

1. During Hospitalization:
   - Risk screen patients and tailor care
   - Establish communication with PCP, family, home care
   - Use “teach-back” to educate patient/caregiver about diagnosis and care
   - Coordinate patient care across multidisciplinary team

Source: AHA “Health Care Leader Action Guide to Reducing Avoidable Readmissions”, AHA/HRET, January 2010”

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Major Strategies to Reduce Avoidable Readmission

2. At Discharge:
   - Implement comprehensive discharge planning
   - Educate patient/caregiver using “teach-back”
   - Schedule and prepare for follow-up appointment

Source: AHA “Health Care Leader Action Guide to Reducing Avoidable Readmissions”, AHA/HRET, January 2010”

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Major Strategies to Reduce Avoidable Readmission

3. Post-Discharge:
   - Promote patient self-management
   - Conduct patient home visit
   - Follow up with patient via telephone

Source: AHA "Health Care Leader Action Guide to Reducing Avoidable Readmissions", AHA/HRET, January 2010"

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Next Steps in Improving Process

- Mother/Baby and Antepartum: Review process for blood pressure monitoring in PIH patients
- Antepartum: Develop pathway for patients with pyelonephritis
- Mother/Baby and Antepartum: Pilot case management process

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What is the true readmission rate: Need for a universal ID

- Social Security Number
  - HIPAA/Privacy concerns
- Medicaid number
  - Generally remains the same from enrollment to enrollment (could be slight changes depending on type of coverage)
  - Not always incorporated into the electronic/administrative data set
  - Missed opportunity
- "Longitudinal ID" -GA Hospital Association
  - Created by data vendor
  - 15 characters
  - 1st 2 letters of first name; 1st 2 letters of last name; last 2 letters of last name; DOB; M or F
  - "JAMURI11021949F" (generally encrypted)

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Summary: Readmissions can have financial, quality and patient satisfaction implications

- Denial of payment for avoidable readmissions ("unplanned readmissions related to the reason for the initial admission")
  - Assume 50% of readmissions are "avoidable"
  - Estimated average annual loss per hospital for OB readmissions : **~$200,000**
  - Estimated average annual loss per hospital for Neonatal readmissions: **~ $ 126,00**

- Separating mothers and babies is never welcome; unnecessary separation especially so!

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Questions for Discussion

- 1. Has your hospital seen an increase in obstetrical or pediatric readmissions; please describe the experience at your hospital.

- 2. Does your hospital and/or how does your hospital obstetric/neonatal service track readmissions – both readmissions to your hospital and readmissions to other hospitals? Can you track readmissions to other hospitals within your system?

- 3. Do you have an active initiative to reduce obstetrical or pediatric readmissions; describe its success?

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