





Agency for Healthcare Research and Quality

Advancing Excellence in Health Care

제1회 KIHASA-AHRQ 비디오 컨퍼런스

의료의 질 향상을 위한 국가적 접근

한국 의료의 질 / 형평성 보고서 작성

2014. 06. 18 (수) 08:30~11:00

한국보건사회연구원 대회의실



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프로그램

08:30-09:00	

09:00-09:10 개회스

환영사 **최병호** | 한국보건사회연구원 원장

09:10-09:30 기조연설

국가수준 의료의 질 향상 접근에서 NHQR/DR (National Healthcare Quality/ Disparities Report)의 역할

Richard Kronick | Director, Agency for Healthcare Research and Quality(AHRQ)

09:30-10:10 주제발표

좌장 정형선 | 연세대학교 보건행정학과 교수

1. 질 높은 의료전달체계 구축을 위한 NHQR/DR 개발 경험과 교훈

Ernest Moy | Director, Center for Quality Improvement and Patient Safety Agency, AHRQ

2. 국가 의료 질 보고서 작성의 필요성과 가능성 강희정 | 한국보건사회연구원 건강보장연구센터장

10:10-11:00 토 론

토론자

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정율원 | 질병관리본부 만성질환관리과 책임연구원

김수경 | 한국보건의료연구원 보건의료안전연구팀장

(*지정토론)

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(National Healthcare Quality/ Disparities Report)의 역할 07
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U.S. Department of Health and Human Services



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The Role of the National Healthcare Quality & Disparities Reports in Improving the **Quality of Care in the United States**

Rick Kronick, Ph.D. Director

Agency for Healthcare Research and Quality

First Korea institute for Health and Social Affairs-AHRQ Video Conference June18, 2014



AHRR Agenda



- AHRQ Overview
- Reporting and Performance in the **United States**
- **Monitoring Quality** Improvement and **Disparities Reduction Nationwide**



Priorities

Priority #1

Produce Evidence to Improve Health Care Quality

Priority #3

Produce Evidence to Increase Access to Health Care

Priority #2

Produce Evidence to Make Health Care Safer

Priority #4

Produce Evidence to Improve Health Care Affordability, Efficiency and Cost Transparency



Transformation of Health Care at the Front Line

At least six components

- Quality measurement
- Aligned payment incentives
- Comparative effectiveness and evidence available
- Health information technology
- Quality improvement collaboratives and learning networks
- Training of clinicians and multi-disciplinary teams

Conway P, Clancy C. Transformation of Health Care at the Front Line. JAMA 2009 Feb 18; 301(7): 763-5



Reporting and Performance Programs in the United States

Hospital Quality

- CAHPS
- HCUP
- Hospital Compare
- EHR Incentive Program
- Inpatient Quality Reporting
- Readmission Reduction Program
- Outpatient Quality Reporting

Physician Quality

- Physician Quality Reporting System
- Physician Compare
- Medicare and Medicaid EHR Incentive Program
- eRx Quality Reporting

Post-Acute Care and Other Setting Quality

- Nursing Home Compare
- LTCH Quality Reporting
- ESRD QIPHospice Quality
- Hospice Quality
 Reporting
- Home Health Quality Reporting

Payment Model

- Hospital Value-Based Purchasing
- Medicare
 Shared Savings
 Program
- CMMI Payment Models

Population Model

- National
 Healthcare
 Quality and
 Disparities
 Reports
- National Quality
 Strategy
- MEPS
- Medicaid Adult
 Quality
 Reporting
- CHIPRA Quality Reporting
- Insurance Exchange Quality Reporting
- Medicare Part C
- Medicare Part D



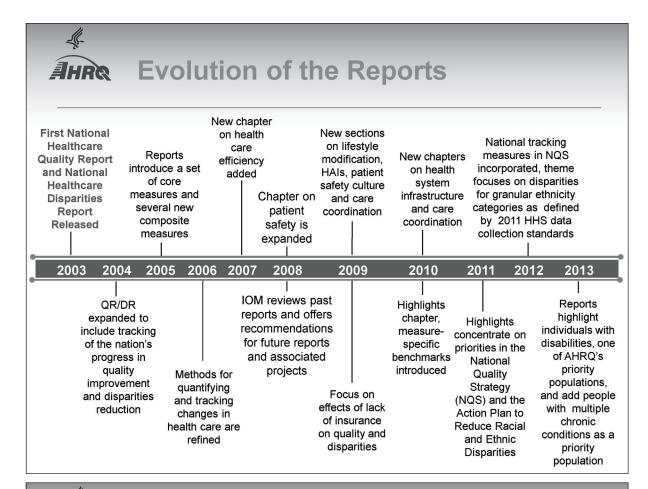
Background and History

- The Healthcare Research and Quality Act of 1999 directed AHRQ to produce two annual reports for Congress
 - ▶ National Healthcare Quality Report (NHQR)
 - ▶ National Healthcare Disparities Report (NHDR)
- AHRQ commissioned the Institute of Medicine (IOM) to help develop visions for the reports
- The initial reports were released in 2003



http://www.ahrq.gov/research/findings/nhqrdr/index.html

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NHQR/NHDR: Annual Snapshot of Health Care in the United States

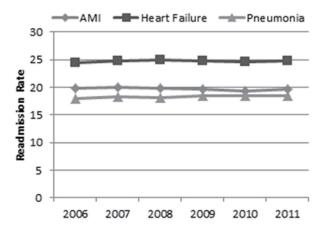
Key Findings in 2013:

	Status	Change over time	Areas improving	Areas lagging
Quality	Fair • 70% of recommended care actually received • Large variation across States	Getting better	Improving more quickly • Hospital care • CMS publicly reported measures • Adolescent vaccines Performing well • New England and West North Central States	Improving more slowly • Ambulatory care • Diabetes care • Maternal and child health Performing more poorly • West South Central and East South Central States
Access	Fair • 26% with difficulties getting care*	Getting worse*	Improving • Availability of providers by telephone	Not improving • Private health insurance coverage*
Disparities	Minorities and people in poverty with worse quality and access for large proportion of measures	No change	Disparities getting smaller HIV disease Patient perceptions of care Few gaps in disparities data on Blacks, Hispanics, and Asians	Disparities getting bigger Cancer screening Maternal and child health Many gaps in disparities data on Native Hawaiians and Other Pacific Islanders



QR/DR Data Synthesis: ReadmissionRates Stable

Median hospital 30-day risk-standardized readmission rate for certain conditions in adults, 2006-2011

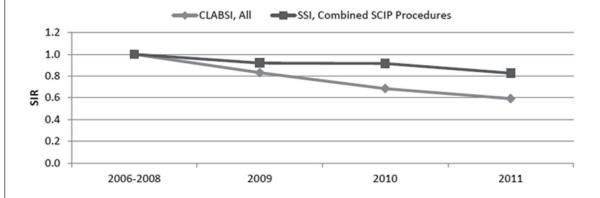


AHRQ 2013 National Healthcare Quality Report



CLABSIs Down by Roughly 40 Percent

Standardized infection ratios for central line-association bloodstream infections and surgical site infections in adults, 2009-2011

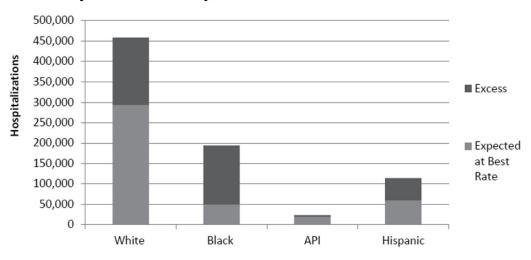


AHRQ 2013 National Healthcare Quality Report



Excess Hospitalizations, Associated Costs for Congestive Heart Failure

Excess number of hospitalizations for congestive heart failure, by race/ethnicity, 2010



AHRQ 2013 National Healthcare Disparities Report



How QR/DR Data is Used

- New York Department of Health used QR/DR data in support of Medicaid legislation
- Commonwealth Fund incorporated AHRQ resources in assessing U.S. Health System Performance
- The American Board of Internal Medicine's based efforts to reduce health disparities on the National Healthcare Disparities Report
- HHS agencies and offices



U.S. Department of Health and Human Services



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Thank You

http://www.ahrq.gov

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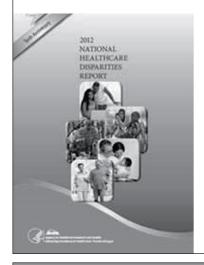
Ernest Moy | Director, Center for Quality Improvement and Patient Safety Agency, AHRQ





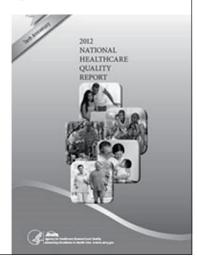
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Lessons Learned in Developing the National Healthcare Reports



Ernest Moy CQuIPS June 18, 2014 Ernest.moy@ahrq.hhs.gov







Reports Framework & Trade-offs

Framework

- ▶ 1º Audience: Policymakers; NOT purchasers or providers
- 1º Analytic Unit: Geographic area; NOT individual provider
- ▶ 1º Use: Tracking; NOT public reporting, pay for performance

Measurement Implications

- Broad & Shallow > Narrow & Deep
- Consensus > Cutting Edge
- Composite > Granular

Reporting Implications

- Products: Family > One
- Analysis: Simple > Complex
- Examples: Typical > Exceptional



Broad & Shallow: Track ~250 Measures from ~40 Databases

Survey data collected from populations

- ► AHRQ, Medical Expenditure Panel Survey (MEPS)
- ► CDC-NCHS, National Health Interview Survey (NHIS)
- ► CMS, Medicare Current Beneficiary Survey (MCBS)
- ► SAMHSA, National Survey of Drug Use and Health (NSDUH)

Data collected from samples of health care facilities

- ▶ American Cancer Society-American College of Surgeons, National Cancer Data Base
- CDC-NCHS, National Ambulatory Medical Care Survey (NAMCS)
- ▶ CMS, End-Stage Renal Disease Clinical Performance Measurement Program

Data extracted from data systems of health care organizations

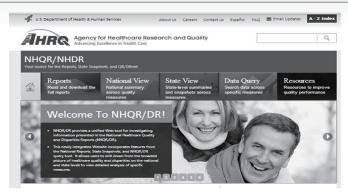
- AHRQ, Healthcare Cost and Utilization Project State Inpatient Databases (HCUP SID)
- ► CMS, Quality Improvement Organization (QIO) program.
- ▶ Indian Health Service, National Patient Information Reporting System (NPIRS)
- ▶ NIH, United States Renal Data System (USRDS)

Data from surveillance and vital statistics systems

- ▶ CDC-National Center for HIV, STD, and TB Prevention, HIV/AIDS Surveillance System
- ► CDC-NCHS, National Vital Statistics System (NVSS)
- NIH-National Cancer Institute, Surveillance, Epidemiology, and End Results program



Family of Products Now Integrated into Single NHQR/NHDR Web Site



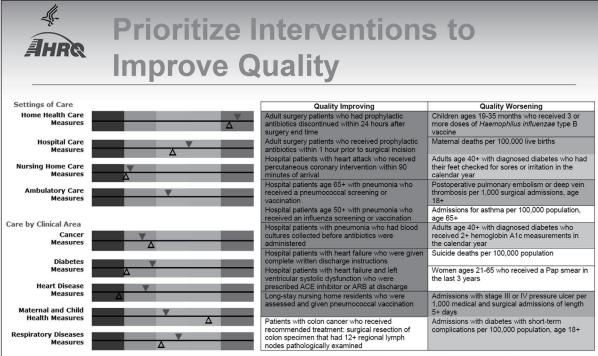
• Features:

- Navigate site by subject areas and topics for intuitive access
- View high level trends
- Compare performance against achievable benchmarks
- Incorporate racial and ethnic comparisons
- Drill down to detailed data, tables, and graphs

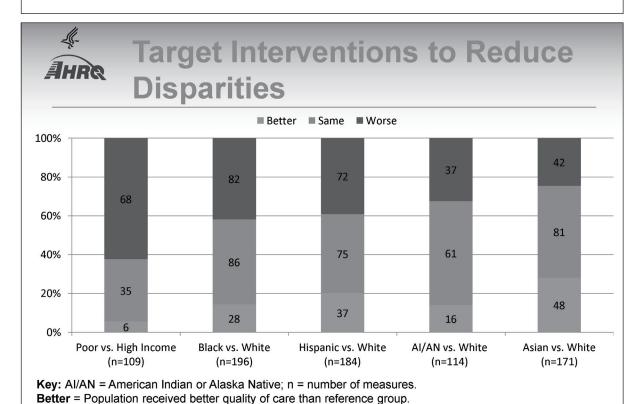


Raise Awareness that Care is **Suboptimal** Number and proportion of measures that are improving, not changing, or worsening, by setting of care 100% 80% 34 ■ Improving 60% ■ No Change ■ Worsening 40% 29 9 11 45 20% 0% Hospital (n=39) Home Health and Nursing Home (n=19) Ambulatory (n=86) Hospice (n=15) Key: n = number of measures. Improving: Quality is going in a positive direction at an average annual rate greater than 1% per year. No Change: Quality is not changing or is changing at an average annual rate less than or equal to 1% per year.

Worsening: Quality is going in a negative direction at an average annual rate greater than 1% per year. Note: For the vast majority of measures, trend data are available for 2000-2002 to 2010-2011. 한국 의료의 질 / 형평성 보고서 작성



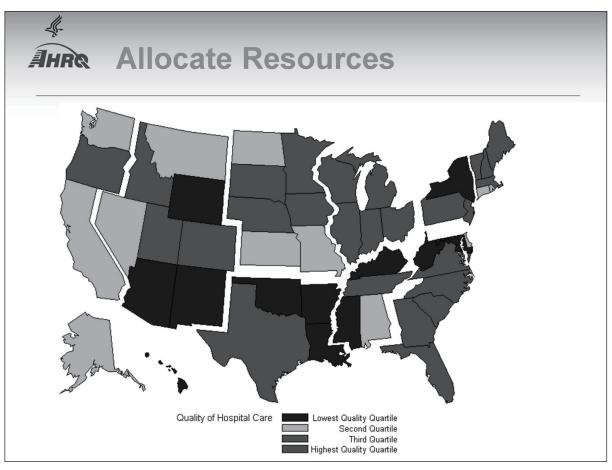
 State Snapshots: Problem Areas Relative to Other States QRDR: Best and Worst Performing Measures

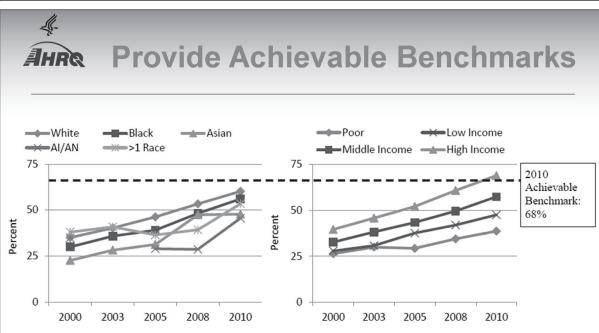


Worse = Population received worse quality of care than reference group. **Note:** For each measure, the most recent data available to our team were analyzed; for the majority of

Same = Population and reference group received about the same quality of care.

most: For each measure, the most recent data available to our team were analyzed; for the majority of measures, this represents data from 2010 and 2011.





Key: AI/AN = American Indian or Alaska Native.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey, 2000, 2003, 2005, 2008, and 2010.

Denominator: Civilian noninstitutionalized population ages 50-75.

Note: Rates are age adjusted to the 2000 U.S. standard population. Colorectal cancer screening includes blood stool test in the past year or sigmoidoscopy in the past 5 years and blood stool test in the past 3 years or colonoscopy in the past 10 years. The 2003 data for Al/ANs did not meet criteria for statistical reliability, data quality, or confidentiality.

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AHR Standardize Measures & Methods

Screening for Breast Cancer

Measure Title

Women age 40 and over who report they had a mammogram within the past 2 years.

Measure Source

Healthy People 2010, measure 3-13.

Tables

1. Women age 40 and over who reported they had a mammogram within the past 2 years, United States, 2003, by

- Race
- Ethnici
- Family income

Data Source

Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey (NHIS).

Denominator

U.S. female resident population age 40 and over.

Numerator

Number of women age 40 and over who report receiving a mammogram within the past 2 years.

Comments

Data reported in Table 1 are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, Section 5 of *Tracking Healthy People 2010*.





AHR Conclusions

- QRDR track quality & disparities for the Nation & States.
- QRDR not designed to direct action but can
 - Make case for action
 - ▶ Identify quality improvement opportunities: Services, populations, communities
 - Provide local benchmarks
 - ▶ Help pick measures & methods
 - Help find solutions
- Local teams with local data do the actual improvement



Our Many Federal & Non-federal Partners

Acknowledgments

The NHQR and NHDR are the products of collaboration among agencies across the Department of Health and Human Services (HHS). Many individuals guided and contributed to these reports. Without their magnanimous support, the reports would not have been possible.

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Primary AHRQ Staff: Richard Kronick, Carolyn Clancy, William Munier, Jeffrey Brady, Ernest Moy, Karen Chaves, Veronica Soileau, Elizabeth Bishop, Darryl Gray, and Doreen Bonnett.

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국가 의료 질 보고서 작성의 필요성과 가능성

강희정 | 한국보건사회연구원 건강보장연구센터장

1st KIHASA-AHRQ VIDEO CONFERENCE

Feasibility of Developing NHQR in Korea

2014. 6.18

Hee-Chung Kang, Director, Center of Health Security Research



Background



- Threatening the sustainability of health care system
 - Population ageing & high prevalence of chronic care conditions
 - Growing demand for high tech & high quality health care
 - Expanding NHI benefit coverage
- Spillovers in health care safety and quality
 - Nationwide shock from recent Sewol Ferry sinking(~300 dead or missing)
 - calling into question safety throughout Korea national system
 - Demanding system approach to provide good quality care in safe
- Shifting toward value based health care system
 - Improving value (△quality or △outcome /△cost)
 - Not cutting cost, expecting savings by improving quality(outcome)

Why National Healthcare Quality Report?



- Mechanism of nationwide quality improvement
 - Standardizing of quality measurement framework
 - Coordinating of multilevel, multidimensional quality performances
- Keep up with quality improvement on the national level
 - Current snap shot
 - Change over time
 - Identify areas where quality improvement are in need
 - Access quality policies
- Soft power of national quality reporting, not inspecting
 - Standardize performance and reduce variation
 - Increase a public awareness of quality of care
 - Induce cooperative quality governance to achieve national goals

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Barometer for continuous system improvement



/

provider centered

- volume driven
- fragmented care
- FFS based payment
- IT as a operating solution

Key driver Quality Improvement

System approach for quality improvement

(the role of government)

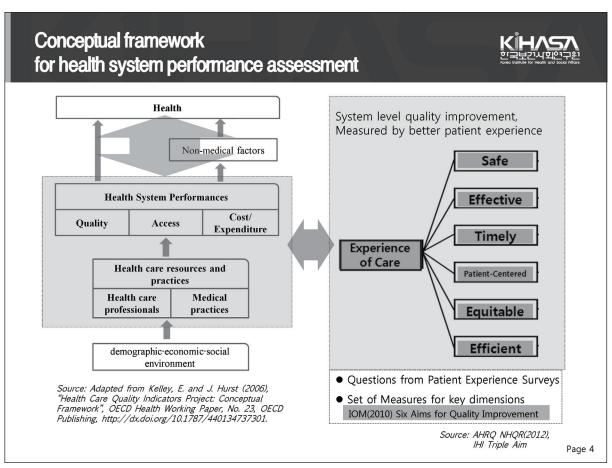
- Toward value—based health care system
 - patient centered
 - outcome driven
 - integrated care-coordination
 - new payment system
 - IT for efficient patient pathway & outcome measurement

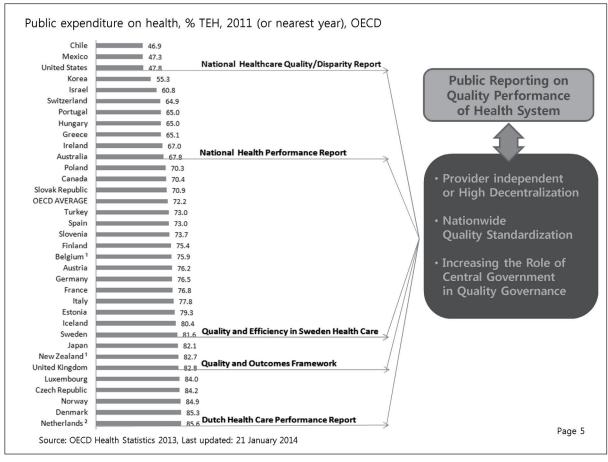
Assessment of system performance in the capability to provide good quality of care
- National Healthcare quality and Disparity Report -

Source: 1. CMS webpage, Affordable Care Act

2. AHRQ. NHQR/DR.

3. Soderlund et al(2012), Progress toward value-based health care, BCG.





Comparing performance dimensions



USA AHRQ NHQR	ENGLAND QOF	NETHELAND	SWEDEN	AUSTRALIA
Effectiveness of care	Premature death,	Effectiveness	Mortality,	Effective,
	Mental health, Dementia		State of Health, etc.	Appropriate
Patient Safety	Safe Care & protection from avoidable harm	Safety		Safe
Timeliness			Availability	Accessible
Patient Centeredness	Positive experience	Responsiveness		Responsive
	of care		Patient experience	
Care Coordination		Coordination		Continuous
Efficiency				Efficient
Health System				Capable,
Infrastructure				Sustainability
Access to Health Care			Availability, Cost	Accessible

Most comprehensive

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Korea Healthcare Quality and Disparity Report



- Overs whole health care system based on AHRQ NHQR framework
- Quality measurement and comparison between subgroups (in conjunction with health plan 2020)
- Directed towards policy leadership: expand the role of central government
- Comparison: quality change over time, international comparison
- Use process & outcome measure based indicators
- Use existing indicators or data sources
 - -Published indicators
 - Produce trial indicators using micro data
 - -Reproduce published information to a meaningful indicators

Data Source for Korea NHQR



Institution	Data	Institution	Data
National Survey		surveillance and vital statistics	
Ministry of Health & Welfare	Korean Youth General Survey	Korea Centers for Disease Control & Prevention(KCDC)	Korean Nosocomial infections Surveillance System(KONIS)
Ministry of Health & Welfare	Epidemiological Survey of Psychiatric	Korea Centers for Disease Control & Prevention(KCDC)	National Infectious Diseases Surveillance System
Ministry of Health & Welfare	Korea National Oral Health Survey	National Health Insurance Service (NHIS)	Statistics of Physical Examination
Ministry of Health & Welfare, Korea Centers for Disease Control & Prevention(KCDC)	Korea National Health & Nutrition Examination Survey(Korea Health Statistics	National Health Insurance Service(NHIS) , Health Insurance Review & Assessment Service(HIRA)	National Health Insurance Statistics, Disea Statistics
Korea Institute for Health and	National Survey on Fertility, Family Health	Korea Institute for Health and Social	Health and Welfare Statistics
Social Affairs(KIHASA)	and Welfare in Korea	Affairs(KIHASA)	Health and Welfare Statistics
Korea Institute for Health and Social Affairs(KIHASA)	Patient Survey	National Cancer Center	Cancer Facts & Figures
Korea Institute for Health and Social Affairs(KIHASA) , National Health Insurance Service(NHIS)	Korea Health Panel	National Emergency Medical Center	Statistics of Emergency Medical
Korea Centers for Disease Control & Prevention (KCDC)	Community Health Survey	Statistics Korea(KOSTAT)	Cause of Death Statistics
Korea Centers for Disease Control & Prevention(KCDC)	Korea National Immunization Survey		
Korea Centers for Disease Control & Prevention(KCDC) (Ministry of Education / Ministry of Health & Welfare)	Korea Youth Risk Behavior Web-based Survey		
Health Care Facilities and Clinical	Data	Other	
National Health Insurance Servi ce	Long-term Care Facility Quality Assessment	Korean Network for Organ Sharing	Report of Transplant
Health Insurance Review & Ass essment Service	Assessment of Long-term Care Hospital	Korea Centers for Disease control &Prev ention, Korea Federation for HIV/AIDS Pr evention	HIV/AIDS Knowledge, Attitudes, Beliefand Behaviors Survey
Health Insurance Review & Ass essment Service	Assessment about use of preventive antib iotics for operations	Korean Breast Cancer Society	Breast Cancer Facts & Figures
Health Insurance Review & Ass essment Service	Assessment of AMI	The Korean Society of Nephrology	End-stage renal disease investigation (ov 505 medical institution, one-off)
Health Insurance Review & Ass essment Service	Assessment of hemodialysis	Prosecution Service	Drug Crime White Paper
Health Insurance Review & Ass essment Service	Number of Medical Care Institutions	Ministry of Health & Welfare, Health Insu rance Review & Assessment Service	OECD Health Care Quality Indicator
Korea Health Industry Developm ent Institute	Survey on National Health Care Resource s	OECD	Health at a Glance 2011
Korea Health Industry Developm ent Institute	Statistics for Hospital management	Ministry of Health & Welfare	Health Plan 2020

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Status of measures applicable to Korea (1)

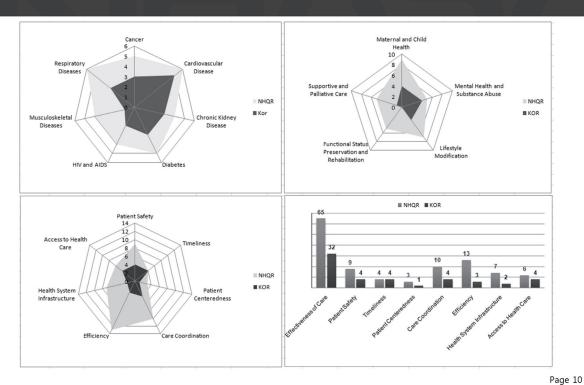


Dimension		Number of measures		
Dimension		AHRQ NHQR(A)	Korea (B)	B/A
	Cancer	4	3	75.0%
1. Effectiveness	Cardiovascular Disease	6	5	83.3%
of Care	Chronic Kidney Disease	4	3	75.0%
	Diabetes	5	3	60.0%
	HIV and AIDS (excluded in Korea NHQR)	4	2	50.0%
	Musculoskeletal Diseases	4	1	25.0%
	Respiratory Diseases	6	3	50.0%
	Maternal and Child Health	9	4	44.4%
	Mental Health and Substance Abuse	5	4	80.0%
	Lifestyle Modification	7	3	42.9%
	Functional Status Preservation and Rehabilitation	5	0	0.0%
	Supportive and Palliative Care	5	1	20.0%
	Sub Total	64	32	50.0%
2. Patient Safety		10	5	50.0%
3. Timeliness		4	4	100.0%
4. Patient Centeredness		3	1	33.3%
5. Care Coordination		8	4	50.0%
6. Efficiency		13	4	30.8%
7. Health System Infrastructure (modified for Korea NHQR)		7	2	28.6%
8. Access to Health Care		6	4	66.7%
Total		115*	56**	48.7%

^{*} This doesn't include all sub-measures as of NHQR 2012
** This includes substitute measures which are not exactly the same

Status of measures applicable to Korea (2)



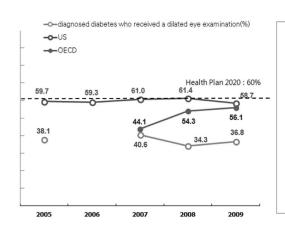


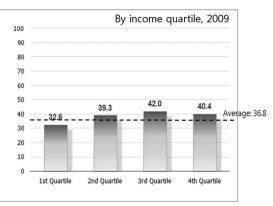
1. Effectiveness



Diabetes: process measure

%, adults age 40 and over with diagnosed diabetes who reported receiving dilated eye exam in the calendar year





Source: OECD, health at a glance.

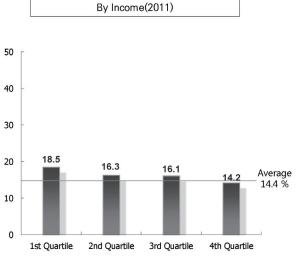
Department of Health and Welfare, Health Plan 2020.

Korea CDC, National Health and Nutrition Examination Survey AHRQ, NHQR(2012)

Effectiveness



Lifestyle Modification : Outcome measure Obese Adults Who Do Not Exercise, %



Adults with obesity who did not spend half an hour or more in moderate or vigorous physical activity at least three times a week

US

52.0 52.3 53.3 53.1 51.7

16.2 16.6 14.4

Source: KIHASA & NHIS, Korea Health Panel AHRQ, NHQR(2012)

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2. Patient Safety



Healthcare-Associated Infections

- -Postoperative Sepsis
- -Catheter-Associated Urinary Track Infections
- -Central line-associated bloodstream infections (CLABSIs)
- -Standardized infection ratios for CLABSIs
- -CLABSIs in pediatric and neonatal intensive care units

Adverse events

- -Mechanical adverse event associated with central venous catheters
- -Obstetric trauma
- -Overall hospital-acquired condition rate

Patient safety culture

-Results from the 2011 Hospital Survey on Patient Safety Culture

74.9 68.4 69.8 80.7

Prevention : Appropriate Timing of Antibiotics Among Surgical Patients

(retired since 2012)

surgical incision,(%)

-O-Adult surgery patients who received appropriate timing of

antibiotics - receipt of antibiotics within 1 hour prior to

2005 2006 2007 2008 2009 2010 2011 2012

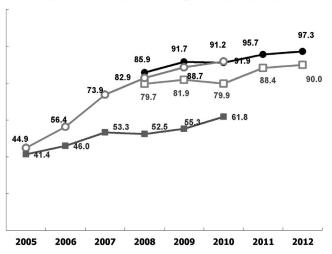
Source: HIRA, quality assessment report(2012) AHRQ, NHQR(2012)

한국 의료의 질 / 형평성 보고서 작성

3. Timeliness



- ---PCI within 90 minutes among patiets with heart attack, Korea
- -D-Fibrinolytic medicine within 30 minutes among patiets with heart attack, Korea
- -O-PCI within 90 minutes among patiets with heart attack under 65,USA
- Fibrinolytic medicine within 30 minutes among patiets with heart attack under 65, USA

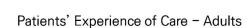


Source: HIRA, quality assessment report(2012) AHRQ, NHQR(2012)

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4. Patient Centeredness



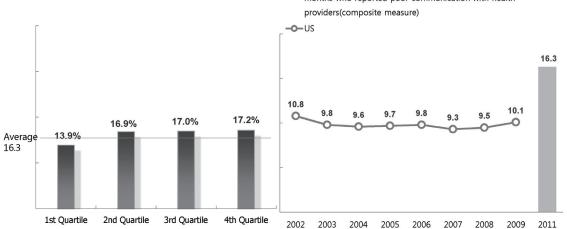


(by income(2011))

Adults who had a doctor's office, clinic or hospital visit in the last 12 months who reported poor communication with health

2005 2006

2007



source: KIHASA & NHIS. Korea Health Panel AHRQ, NHQR(2012)

5. Care Coordination



No comparable indicators

* AHRQ care coordination indicators

Measures	Specific Measures	
Transitions of care	Adequate hospital discharge information	
Readmissions	Readmissions for cognitive heart	
Toda constitution of information	Provider asking about medications from other doctors	
Integration of information	Electronic exchange of medication information	
Children with an aid back are made (CCLICN)	CSHCN with effective care coordination	
Children with special health care needs(CSHCN)	CSHCN with a medical home	

Source: AHRQ, NHQR(2012)

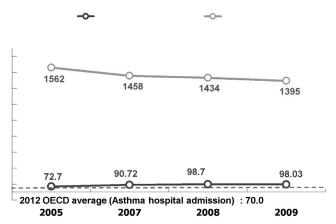
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6. Efficiency



Measures

- -Preventable emergency department visits
- -Preventable hospitalizations
- -Perforated appendixes
- -Trends in hospital cost efficiency



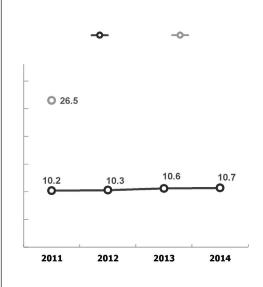
source: HIRA, developing OECD quality indicators(2011) AHRQ, NHQR(2012)

Compare only its trend!

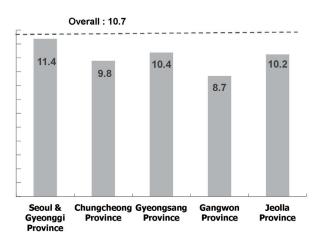
- * Korea include only 7 conditions(asthma, COPD, diabetes short-&long-term complications, controlled diabetes, diabetes lower extremity amputation, hypertension
- extremity amputation, hypertension * AHRQ NHQR produce a composite measure on all ACSC quality indicators

7. Health System Infrastructure





Obstetrics & Gynecology (rate per 100,000 population, Korea) by region(2014)

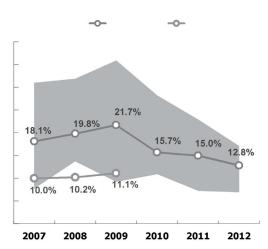


source: HIRA, NHI statistics(2014) AHRQ, NHQR(2012)

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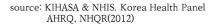
8. Access to Health Care (1)

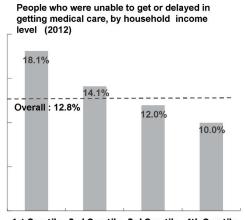




* Korean measures : Including medical care and dental care

** US measures : Including medical care, dental care and



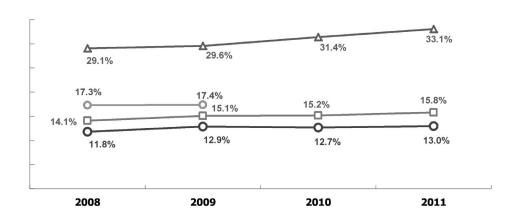


1st Quartile 2nd Quartile 3rd Quartile 4th Quartile

8. Access to Health Care (2)



- ---People whose out-of-pocket medical expenses were more than 10% of total family income (total, Korea)
- -O-People whose out-of-pocket medical expenses were more than 10% of total family income (under age 65, Korea)
- -O-People whose out-of-pocket medical expenses were more than 10% of total family income (under age 65, US)

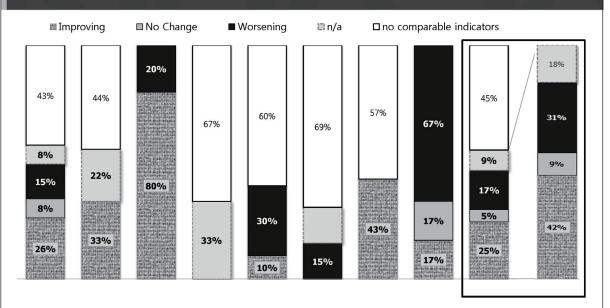


Source: KIHASA & NHIS, Korea Health Panel

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Changing over time





Improving=going is a positive direction at an average annual rate greater than 1% per year No Change=going is not changed or changing at an average annual rate less than 1% per year Worsening=going is a negative direction at an average annual rate greater than 1% per year n/a = if indicators have only one year, no comparable indicators are measures which can't produce in Korea among AHRQ all measures Note: for each measure, the earliest and most recent data were analyzed, data from 2005~2011

Challenges



- 1. Establishing National Quality Strategy
- 2. Cooperation among quality stakeholders, government agencies
- 3. Data diversity

Administrative data-dependent --> Different types of data-complementary

Survey data

Self-reported data

Administrative data (claims data, vital statistics)

Typically non-clinical indicators

Clinical and coverage indicators

- 4. Expanding measures & scientific validation of measures
- 5. Policy implications

|--|

MEMO
