Mandatory Quality Assurance in the German Health Care System

HOPE – Study Tour Berlin October 30, 2014

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AQUA – Institut für angewandte Qualitätsförderung
und Forschung im Gesundheitswesen, Göttingen

Institut für angewandte
Qualitätsförderung und Forschung
im Gesundheitswesen GmbH

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- Established in Göttingen, Germany in 1995
- Independent, impartial, focused on quality measurement and improvement in health care

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Business areas

- Quality in health care
- Quality improvement and accreditation programs with indicators and benchmarking (Germany, Austria, Switzerland, Algeria, Kenya, Tanzania, etc.)
- Development and implementation of data-based programs for improvement of chronic care, multi-morbidity and rational prescribing (Germany)
- Institute that executes mandatory national quality assurance for health services according to §137a of the German Social Code, Book V:

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Agenda

- Background of Quality Assurance (QA)
- Technical functioning of QA
- Example: QA breast surgery
- Methodology to develop QA procedures
- New Developments
- Summing up

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Background: The German health care system

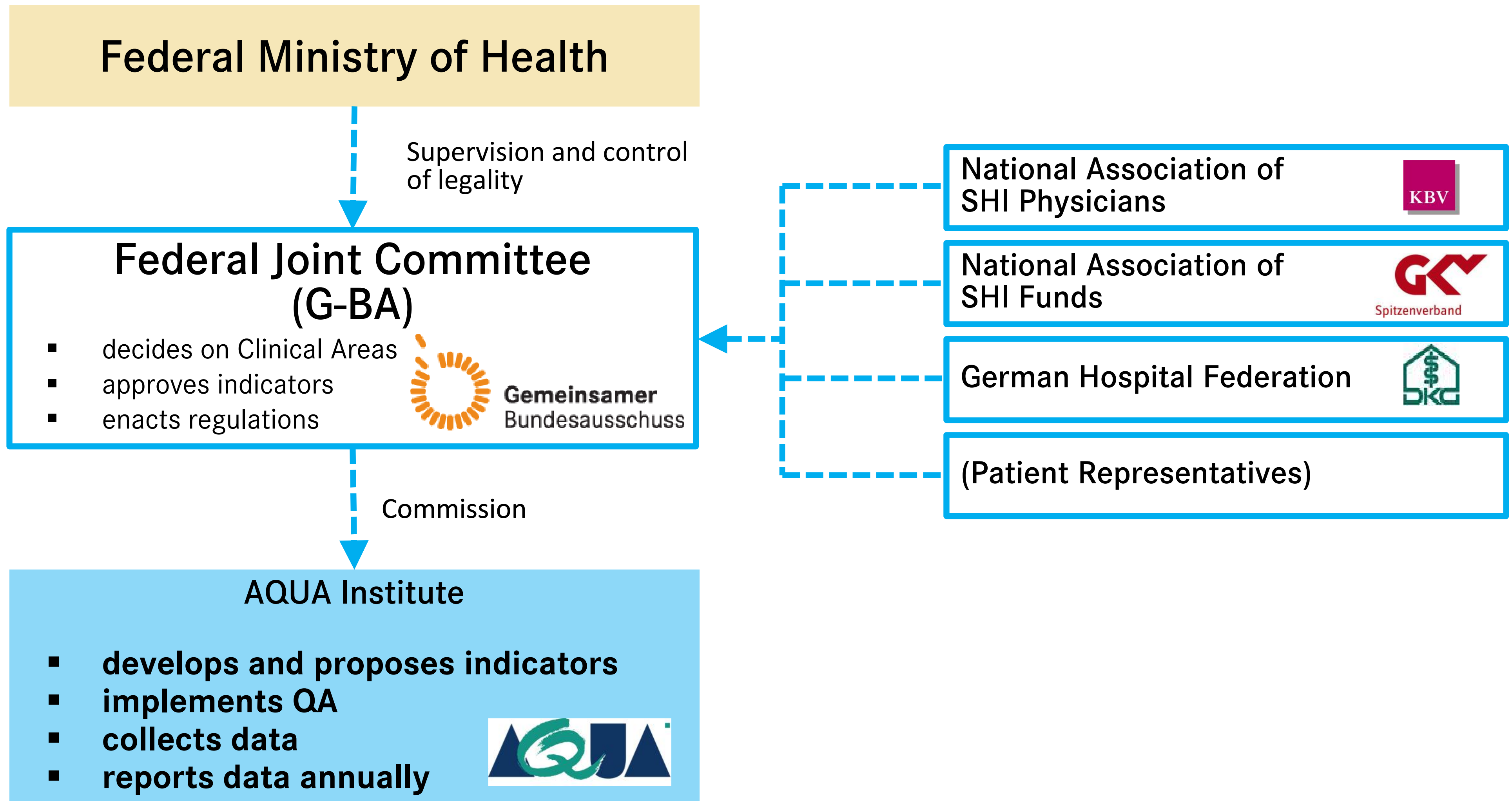
- Population 80.5 Mill
- 16 „Länder“: different infrastructure, same regulations for medical services (insurance coverage) (German Social Code, Book Five)
- Health insurance: 88 % statutorily health insured (132 insurance companies), 11.8 % privately insured, 0.2 % not insured:
  – SHI-represented by National Association of SHI Funds

- 1,700 Hospitals
  – represented by German Hospital Federation

- Outpatient care: dominated by office-based physicians: 144,000 physicians
  – represented by National Association of SHI Physicians and of Dentists

Data 2012, Stat. Bundesamt © 2014 AQUA-Institut GmbH

Policy & Administrative Framework



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History

- 2004:
  - DRG-Reimbursement for all medical procedures (except mental health care)
  - Mandatory QA for certain procedures (clinical areas) in hospital
    - To control for unwanted effects of DRG
    - QA is carried out by an institution on ad hoc commission, belonging to the carriers of health care
- 2009:
  - QA is commissioned to independent institution (AQUA Institute) after tender
  - Political decision to expand QA cross-sectorally
- 2014:
  - Status of QA:
    - 30 clinical areas (all hospital)
    - 400+ indicators
      - 20% indicators risk-adjusted
      - 289 publically reported
    - 9 clinical areas for cross-sectoral QA developed/in development
- 2016
  - QA will be executed by a public institute: Institut für Qualität und Transparenz im Gesundheitswesen (IQTIG)

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Concept and Aim of QA

- Concept
  - Patient-centered, patient outcome
    - » Patients involved in all processes of QA
  - Focus on quality deficits in service pathways

- Aim
  - Compare similar services of different providers
  - Quality improvement (learning approach)
  - Accountability of service provider
  - Transparency & patient information

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Scope of QA

- Measure quality with indicators
- QA only for clinical areas (no general indicators)
- 30 clinical areas (all hospital)
- 434 indicators (78 risk adjusted)
- Annual assessment and feedback
- At the moment:
  - Only hospitals
  - Data collection mainly via extra documentation

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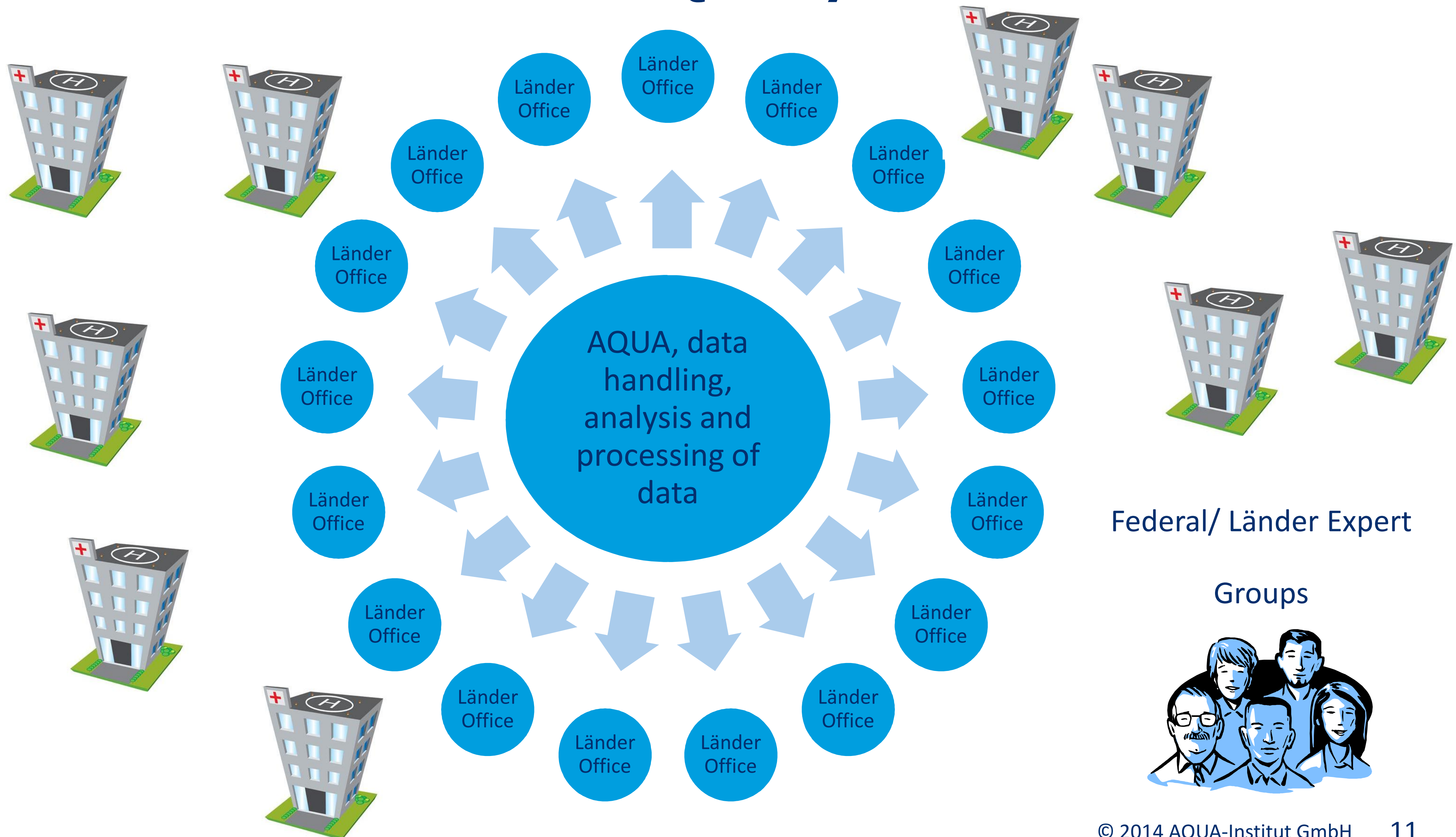
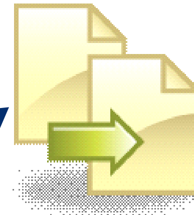
Infrastructure for supporting QA: 1 AQUA + 17 Länder Administrative Offices for Quality Assurance



Flow of Data

17 Länder Administrative Offices for Quality Assurances

1. Data Collection



QA Data

2. Data Processing + Analysis

Outcome Report

3. Reporting

Federal/Länder Expert Groups

1. Data Collection

BASIS
Genau ein Bogen muss ausgefüllt werden
1-7 Basisdokumentation
1 Institutionskennzeichen
http://www.arge-ik.de
2 Betriebsstätten-Nummer
3 Fachabteilung
§ 301-Vereinbarung
§ 301-Vereinbarung: http://www.dkgev.de
Schlüssel 1
4 Identifikationsnummer des Patienten

11 bei Aufnahme invasive maschinelle Beatmung
0 = nein
1 = ja
wenn bei Aufnahme invasive maschinelle Beatmung = nein
12> Desorientierung
bei Aufnahme
0 = nein
1 = ja, pneumoniebedingt
2 = ja, nicht pneumoniebedingt
wenn bei Aufnahme invasive maschinelle Beatmung = nein
13> spontane Atemfrequenz
bei Aufnahme

19-26 Verlauf
19 Beginn der Mobilisat
0 = keine Mobilisation
1 = innerhalb der ersten 24
Aufnahme
2 = nach 24 Stunden und s
20 Verlaufskontrolle des
Proteins oder Procal
innerhalb der ersten
h) des Aufenthalts
0 = nein
1 = ja
wenn Verlaufskontrolle CRP/PCT = ja
21> Abfall des C-reaktive

- At present:
  - Majority of data recorded manually (but not paper-based)
  - Follow-up: in-hospital or voluntary reporting
  - Increasingly data taken out of Electronic Hospital Reporting System
- Future:
  - Health insurance claims data (also cross-sectionally)
  - Patient survey (difficult to be implemented)
- Some documentation by hand is un-avoidable

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Cholecystectomy

Carotid artery reconstruction

Community-acquired pneumonia

Pacemaker: Implantation

Pacemaker: Replacement of generator/battery

Pacemaker: Revision/system replacement/remov

Implantable cardioverter defibrillators: Implantatic

Implantable cardioverter defibrillators: Replacement of generator/battery

Implantable cardioverter defibrillators: Revision/system replacement/removal

Coronary angiography and percutaneous coronary intervention (PCI)

Coronary surgery, isolated

Aortic valve surgery, isolated

Combined coronary and aortic valve surgery

Heart transplantation

Lung and heart-lung transplantation

Liver transplantation

Living liver donation

Kidney transplantation

Living kidney donation

Pancreas and pancreas-kidney transplantation

Breast surgery

Obstetrics

Neonatology

Gynecological surgery

Femoral fracture near the hip joint

Hip replacement: Primary implantation

Hip replacement: Revision and component exchange

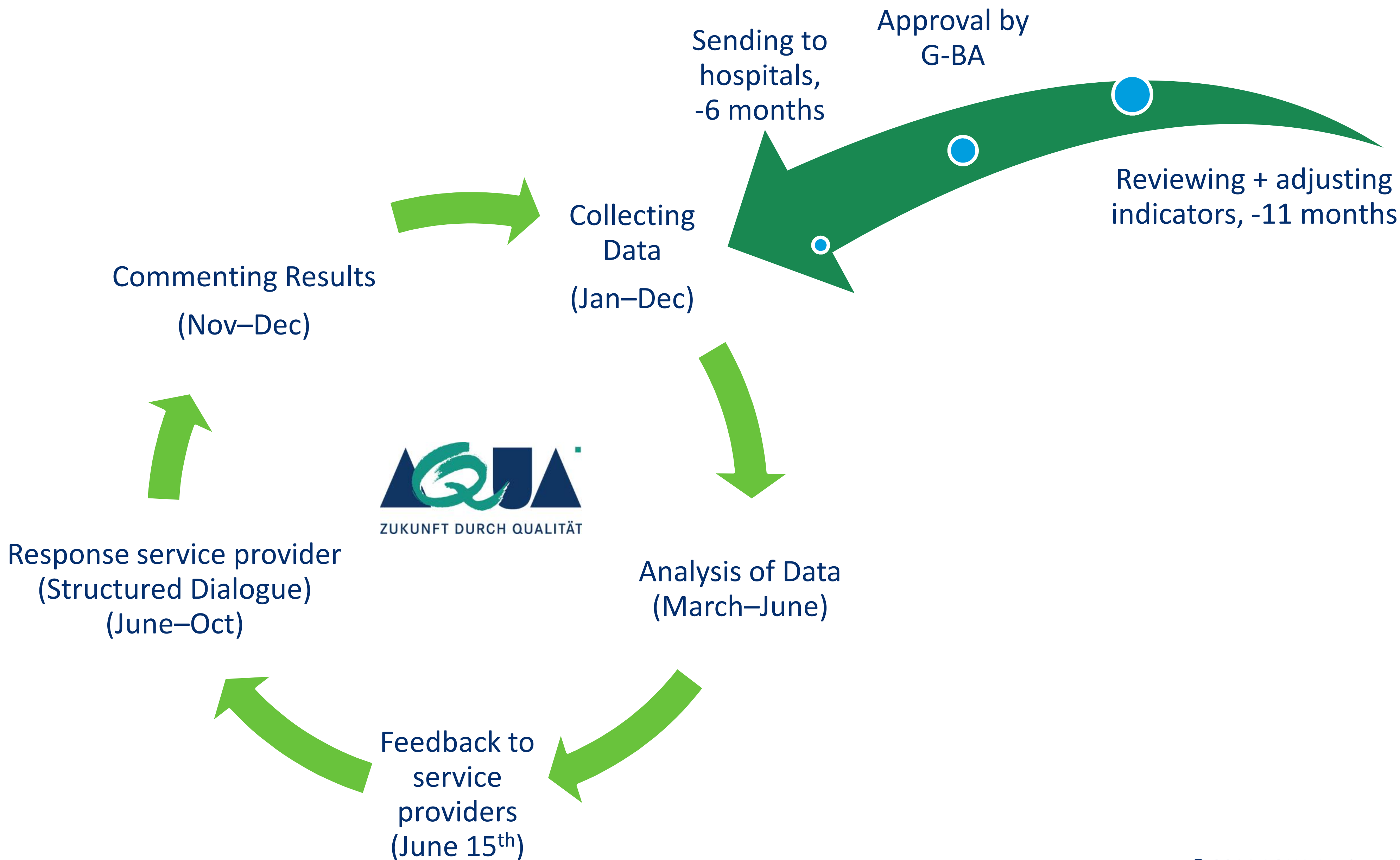
Total knee replacement: Primary implantation

Knee replacement: Revision and component exchange

Nursing: Prevention of pressure ulcers

- Direct QA procedures
- Indirect QA procedures

2. Data Processing + Analysis



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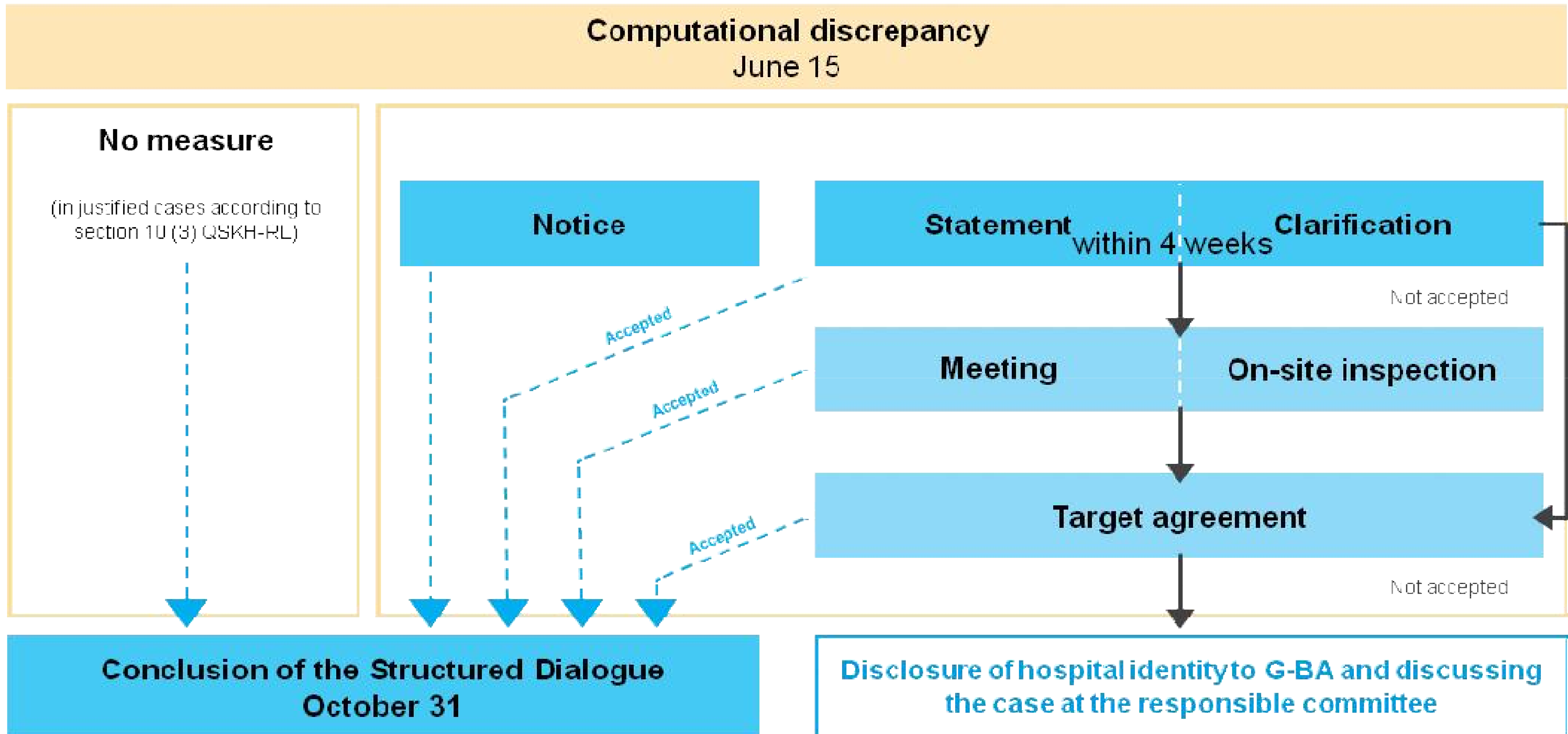
Structured Dialogue: work flow



- Last data in - feedback to hospitals: 6 months
- Last data in - conclusion of Structured Dialogue: 9 months
- Last data in - report to G-BA: 17 months

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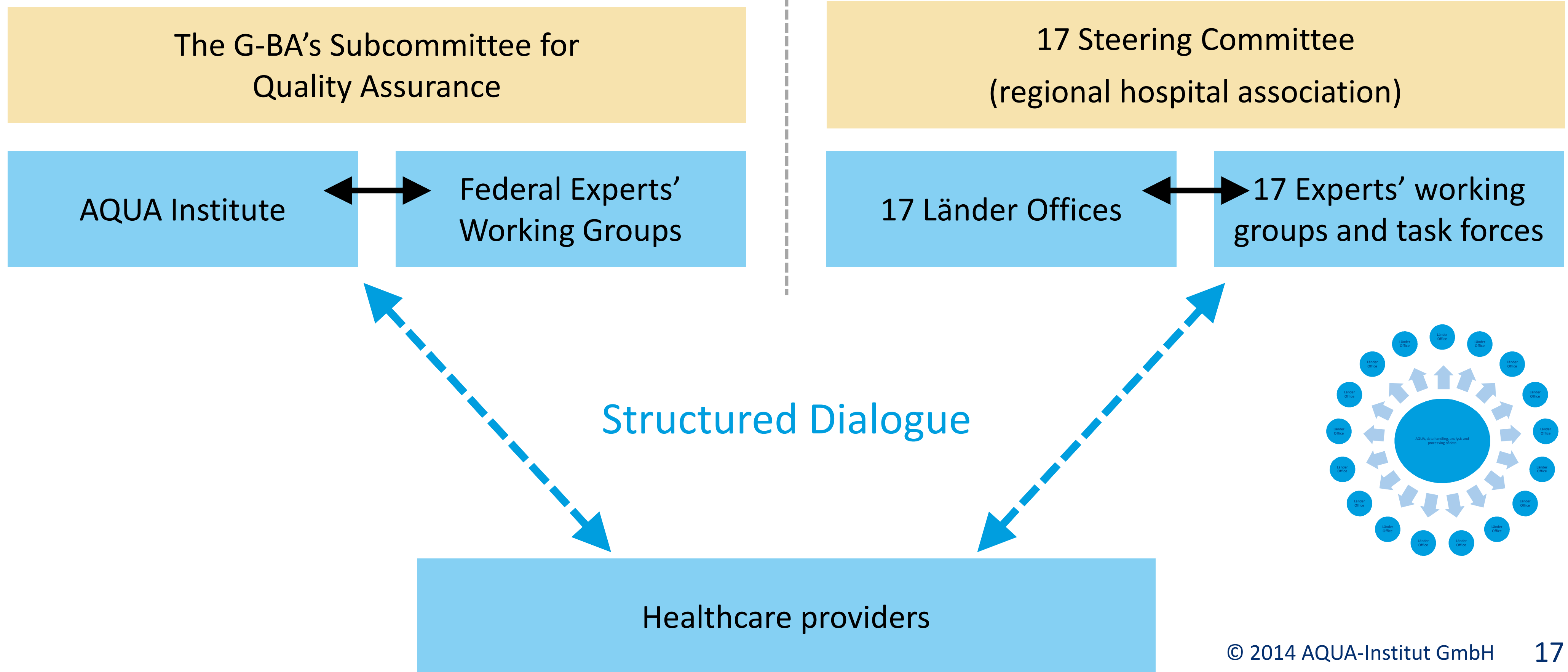
Structured Dialogue – participants and responsibilities

Direct procedure

Indirect procedure



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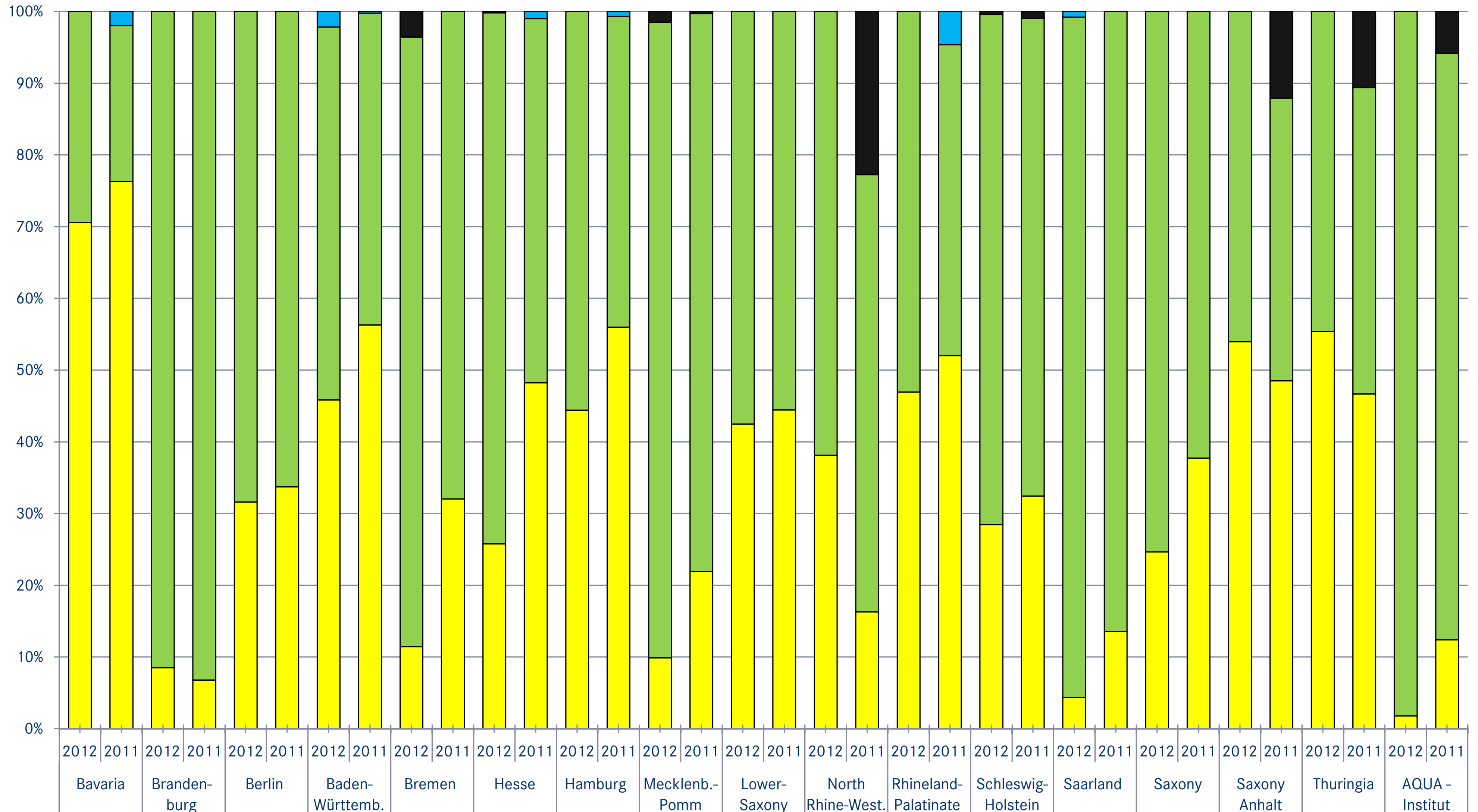
Structured Dialogue: Measures taken and results, Data 2012

Statistical Discrepancies	19,440
No measures	1,000 (5%)
Notice sent	8,500 (44%)
Statement requested	9,800 (50%)
Other	140 (0,7%)
Meeting	290
On-site inspection	63
Target agreement	453
Qualitatively non-discrepant	37%
Qualitatively non-discrepant with special monitoring	51%
Qualitatively discrepant	11%

Measures taken for computational discrepancy according to Land (+AQUA)



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3. Reporting

Annually:

1. Hospital-specific data published on health insurance websites
2. German Hospital Quality Report, free download of 2009–2012 reports in English, http://www.sqg.de/quality-report/index.html
3. Report: Analysis of Länder Results
4. Report on Structured Dialogue

Institute for Applied Quality Improvement and Research in Health Care GmbH

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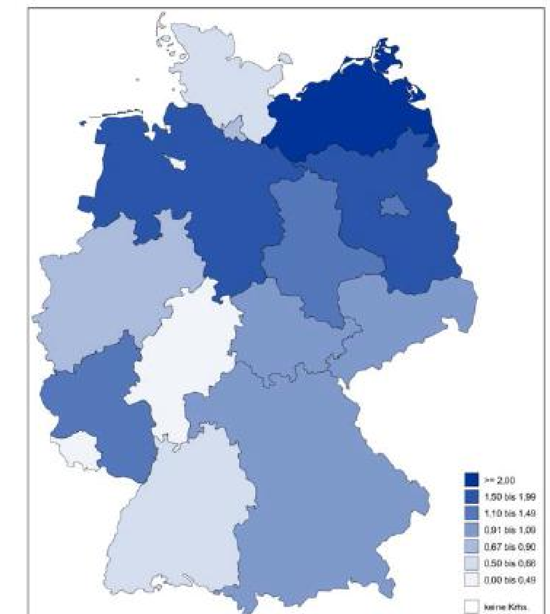
ZUKUNFT DURCH QUALITÄT

German Hospital Quality Report 2012

Commissioned by:



Hospital mortality, community-acquired pneumonia, data 2012

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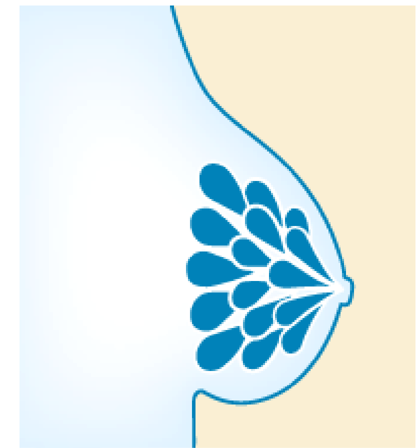

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Indicators breast surgery

2013: 62,766 cases of breast-cancer surgery in 745 hospitals

Subject	Indicator	Reference range	Result 2013	Result 2012	Trend
Pre-therapeutic diagnostics	1. Pre-therapeutic diagnosis histologically verified	≥ 90,0 %	96,1 %	95,9 %	=
Intra-operative diagnostics	2. Intra-operative specimen x-ray with mammographic wire marking	≥ 95,0 %	96,7 %	97,1 %	=
	3. Intra-operative specimen sonography with sonographic wire marking	Not defined	66,7 %	63,5 %	+
	4. Primary axillary dissection in DCIS	≤ 5,0 %	1,1 %	1,7 %	=
	5. Lymph node removal with DCIS and breast conserving therapy	≤ 29,8 %	16,0 %	18,1 %	+
	6. Sentinel lymph node biopsy	≥ 80,0 %	93,9 %	87,7 %	+
Time: diagnosis - surgery	7. Less than 7 days between diagnosis and surgery	≤ 42,1 %	10,5 %	12,3 %	+
	8. More than 21 days between diagnosis and surgery	≤ 55,1 %	27,0 %	23,8 %	-

Data: Federal report 2013, Breast Surgery

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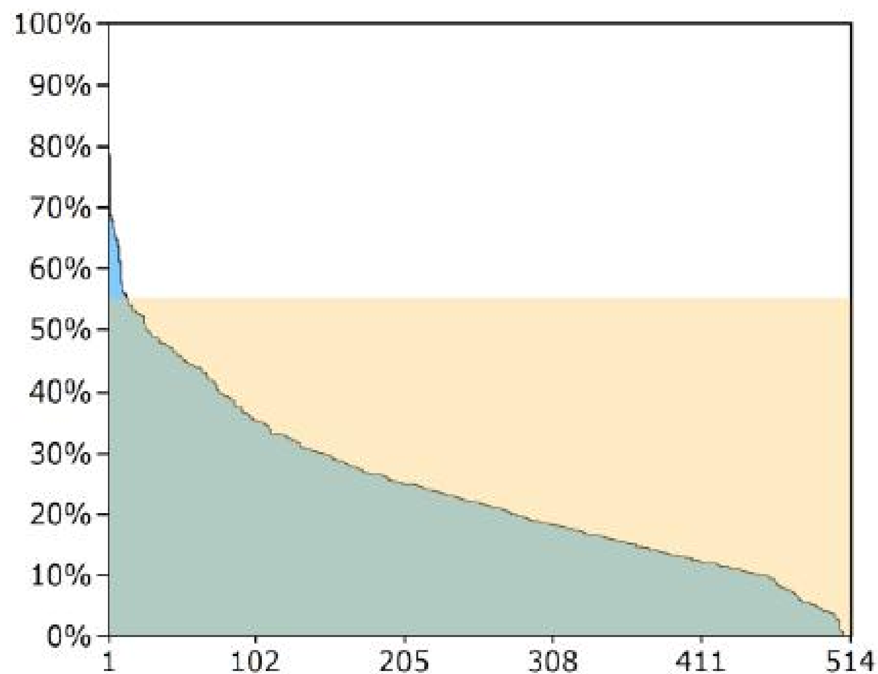
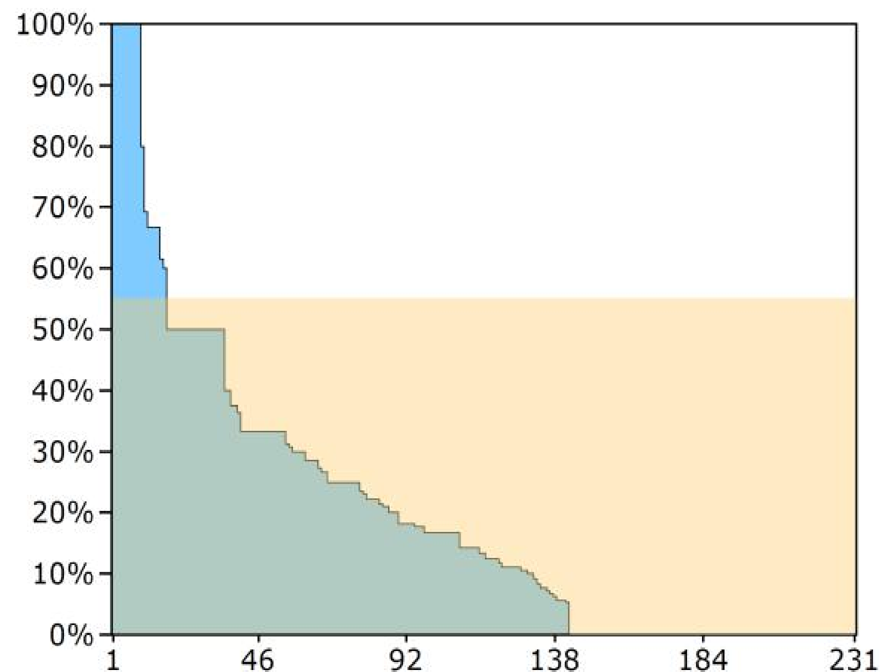
2013 results for indicator More than 21 days between diagnosis and surgery

Time Diagnosis- Surgery 2013: Median 15 days



Hospitals > 20 cases, n= 514

Median: 22 % (range 0-79%)



Hospitals < 20 cases, n= 231

Median: 13 % (range 0-100%)

Data: Federal report 2013, Breast Surgery

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Structured Dialogue:
Results breast surgery 2012

Indicator	Computational Discrepancies n/%	Qualitatively non-discrepant n/%	Qualitatively discrepant n/%	Dokumentation Problem n/%	No collaboration n/%
Ind. 7+8: time diagnosis - surgery	131	126/86.2%	2/1.5%	1/0.8%	0/0.0%

Data: Report on Structured Dialogue 2012

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Process of developing QA procedures

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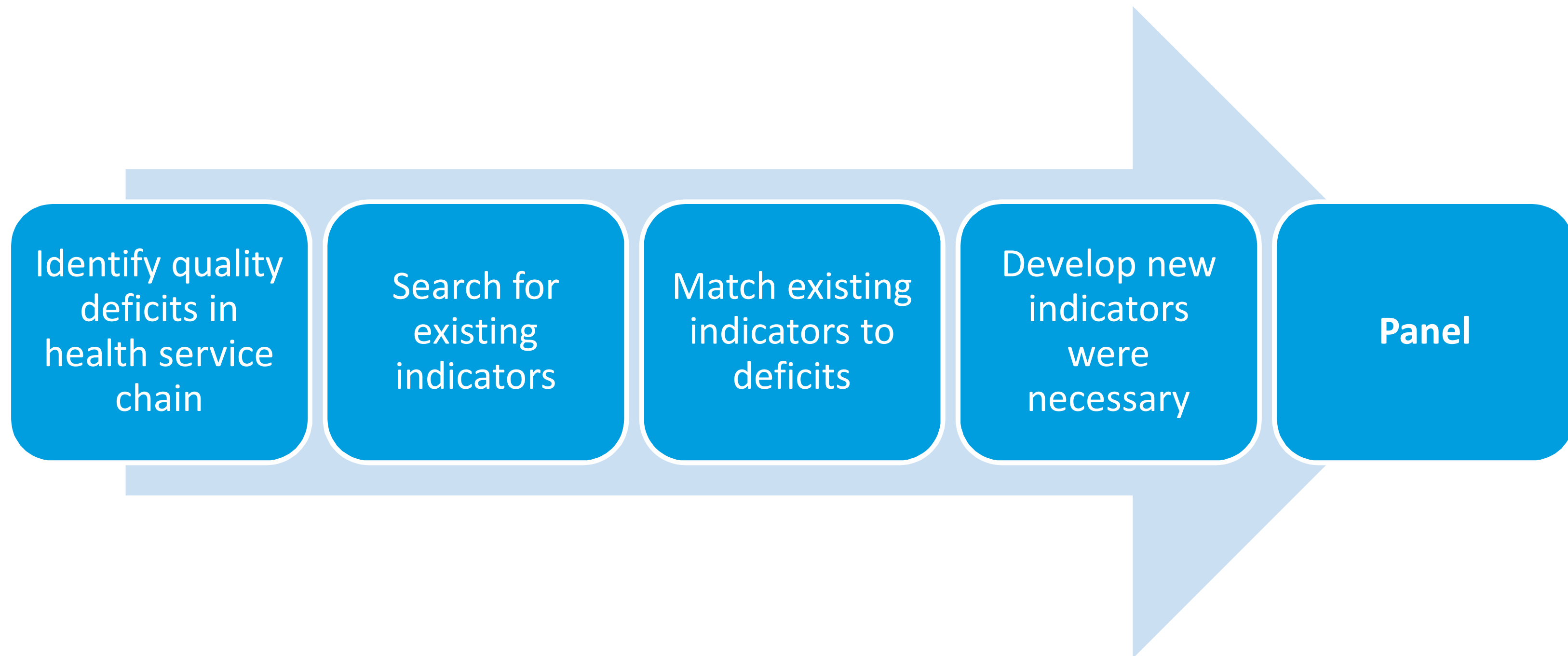
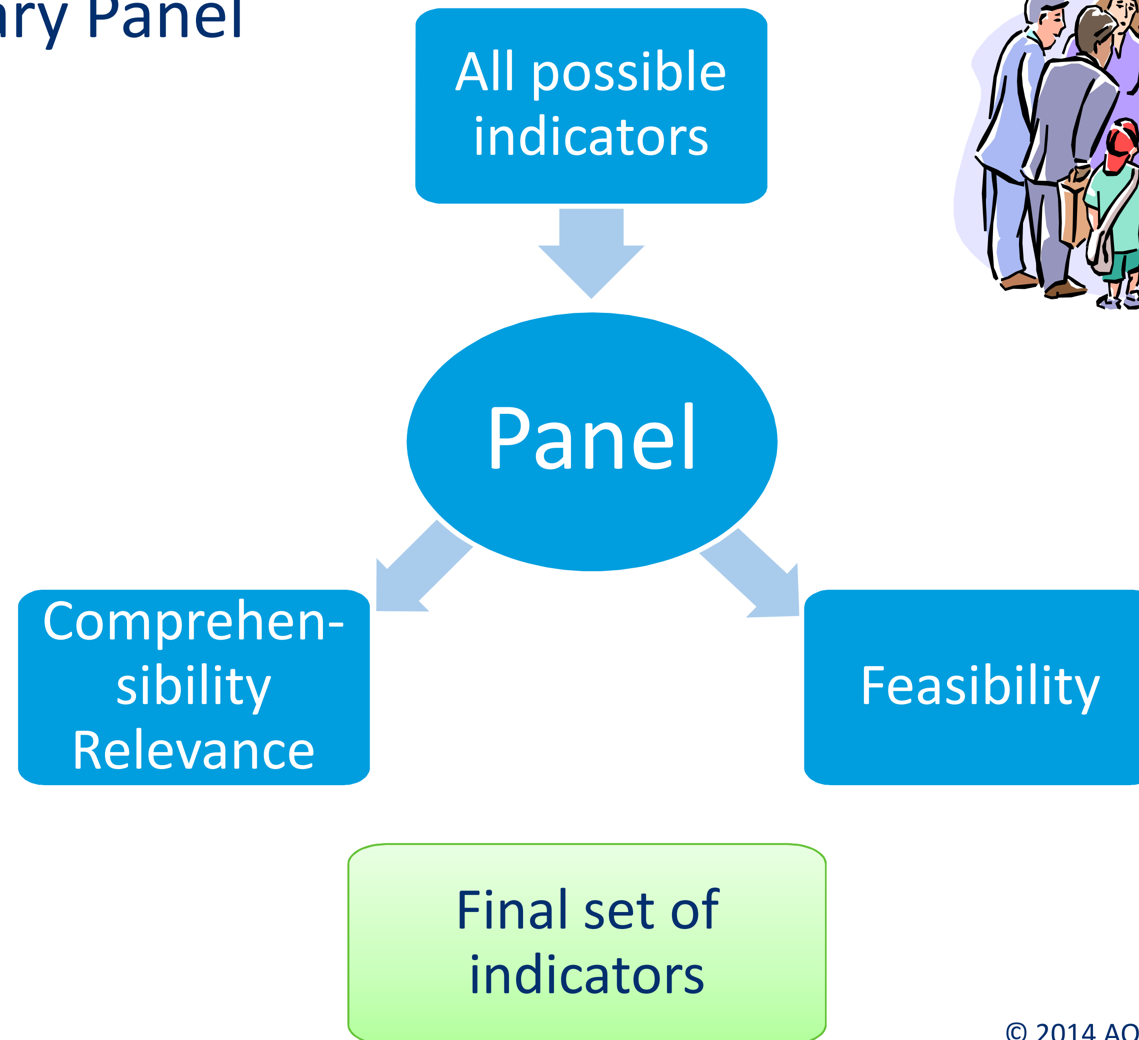
1. Identifying indicators

- Indicators only to be developed for quality deficits



2. Panel

- Multidisciplinary Panel



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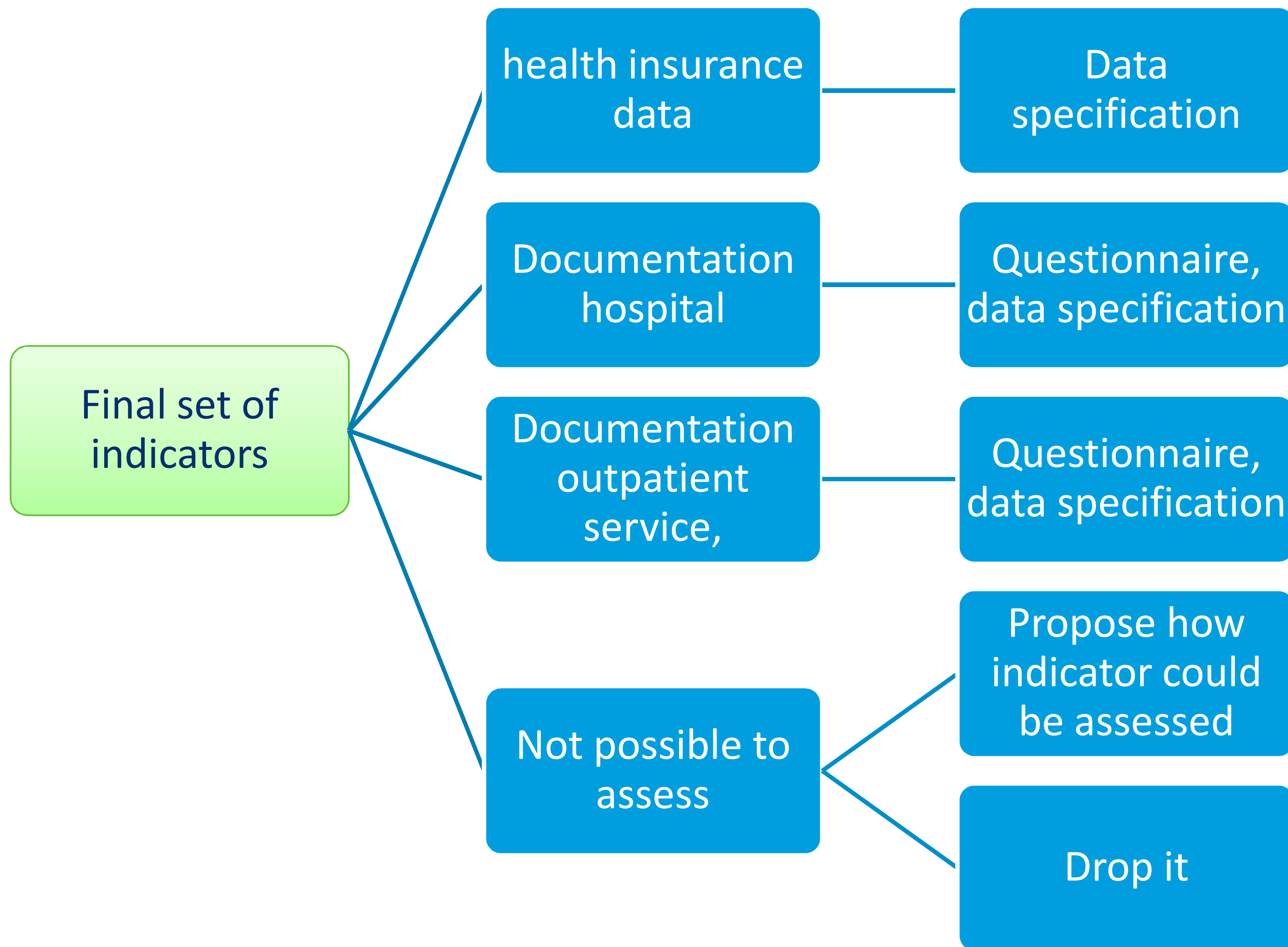
3. Feasibility check



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Developments: cross-sectional quality assurance

- Rational
  - Longer follow-up
  - Similar procedures in in- and outpatient care (e.g. cataract surgery)
  - Disorders predominately cared for in outpatient care (mental disorder, renal failure)
- Precondition
  - No data transfer between in- and outpatient care
  - Different coding systems in in- and outpatient care
- Challenge
  - Triggering cases for documentation
  - Follow-up of patients
  - Documentation in outpatient care

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Developments: Data Sources

- Use of health insurance claims data
  - Only data that is available cross-sectorally
  - Law allowing use of claims data in place since 2012, directives to be expected 2014

- Patient questionnaire
  - To supplement indicators, case-related
  - Mode of distributing the questionnaire still unclear
  - Patient questionnaires in development for Arthroscopy and PCI
- Peer Reviews

1. Reduce documentation efforts for service providers
2. Gain new information

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Developments: Comparative public reporting

Perinatal zentren

Startseite Information Krankenhäuser Hintergrund Suche

Sie befinden sich hier: Start >Krankenhäuser

Ergebnisse Ihrer Krankenhaussuche

In der Tabelle sehen Sie das Ergebnis ihrer Suche. Dies ermöglicht Ihnen, Krankenhäuser in Bezug auf die Entfernung, die Anzahl behandelter Frühgeborener und das Überleben von Frühgeborenen unter 1500 g zu vergleichen. Weiterhin können Sie die Ergebnisse in auf- oder absteigender Reihenfolge sortieren oder eine neue Suche starten.

Krankenhaussuche

Ihre PLZ / Ort 80331 Gewünschter Umkreis 100 km Neue Suche

Wählen Sie in der angezeigten Übersicht ein Krankenhaus aus, um weitere Ergebnisse zu erhalten.

Ihre Suche ergab 7 Ergebnisse im Umkreis von *100 km* um *80331 München*

Krankenhaus	Entfernung	Fallzahl	Behandlungs-routine risikobereinigte Anzahl	Überleben von Frühgeborenen Gesamt	Überleben von Frühgeborenen ohne schwere Erkrankung
			Bundesmaximum: 255,85 Bundesminimum: 0,70 Bundesdurchschnitt: 39,55	Bundesmaximum: 1,06 Bundesminimum: 0,93 Bundesdurchschnitt: 1,00	Bundesmaximum: 1,12 Bundesminimum: 0,84 Bundesdurchschnitt: 1,00
Klinikum rechts der Isar der TU München Kinderklinik Schwabing	2 km	33	Krankenhaus: 38,36	Krankenhaus: 1,02	Krankenhaus: 0,95
Städtisches Klinikum München GmbH - Klinikum Schwabing	2 km	46	Krankenhaus: 26,52	Krankenhaus: 0,95	Krankenhaus: 0,94
Städtisches Klinikum München GmbH, Klinikum Harlaching	7 km	33	Krankenhaus: 30,53	Krankenhaus: 1,02	Krankenhaus: 1,08
Klinikum der Universität München	9 km	126	Krankenhaus: 144,13	Krankenhaus: 1,02	Krankenhaus: 0,93

Begriffserläuterung (Glossar)

- Behandlungsroutine
- Bundesdurchschnitt
- Bundesmaximum
- Bundesminimum
- Entfernung
- Ergebniskarte
- Fallzahl
- Frühgeburt
- Wert des Krankenhauses
- Überleben von Frühgeborenen
- Überleben von Frühgeborenen ohne schwere Erkrankung

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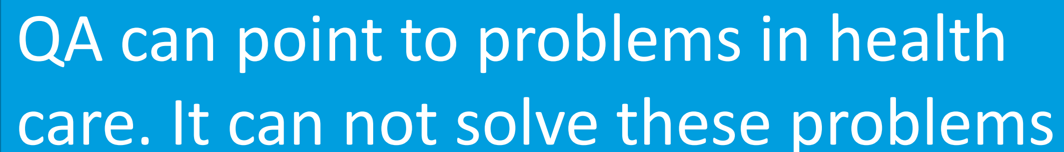
Summing up

- 10 years mandatory QA in Germany
- Gotten more complex
- Firm implementation in health care system
- Continuous rise in relevance
- Future:
  - use more health insurance data
  - Include outpatient services
  - Patient questionnaire
  - Public reporting



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Cross-sectoral quality
in health care

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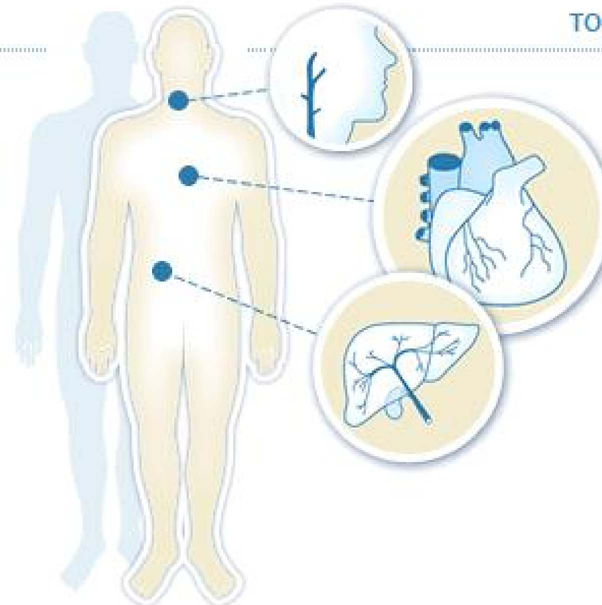
TOPICS

INFORMATION

AQUA Institute Project information

Cross-sectoral quality in health care

SQG brings the quality assurance of the inpatient and outpatient sector in Germany together - these have, up until now, been separate. The goal: to meaningfully coordinate the quality requirements of both of these sectors in the future in order to reach a better and more efficient quality of care in the interests of both patients and health care providers. The AQUA Institute undertakes these tasks in accordance with the requirements on § 137a SGB V (German social code book).



Task within the framework of the German social code book (§ 137a SGB V)

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