1st International Congress of Breast Disease Centers 2011

Cancer Registry in Germany: The Munich Experience

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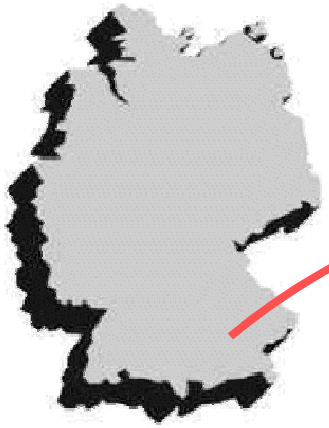
Munich Cancer Registry (MCR)

1st International Congress of Breast Disease Centers, Paris 28. & 29. January 2011

Catchment area: 4.5 million people

Munich Cancer Registry: 12 Certified Breast Centers

11 by DKG/DGS (German Cancer/Senology Society)
3 by EUSOMA



Upper Bavaria

21 Pathology Institutes
21 Radiotherapy Institutes
73 Hospitals

23 Public Health Offices
> 500 Registration Offices

Value of Cancer Registries for Breast Disease Centers, Clinics / Ambulatory Sector, Scientific Community

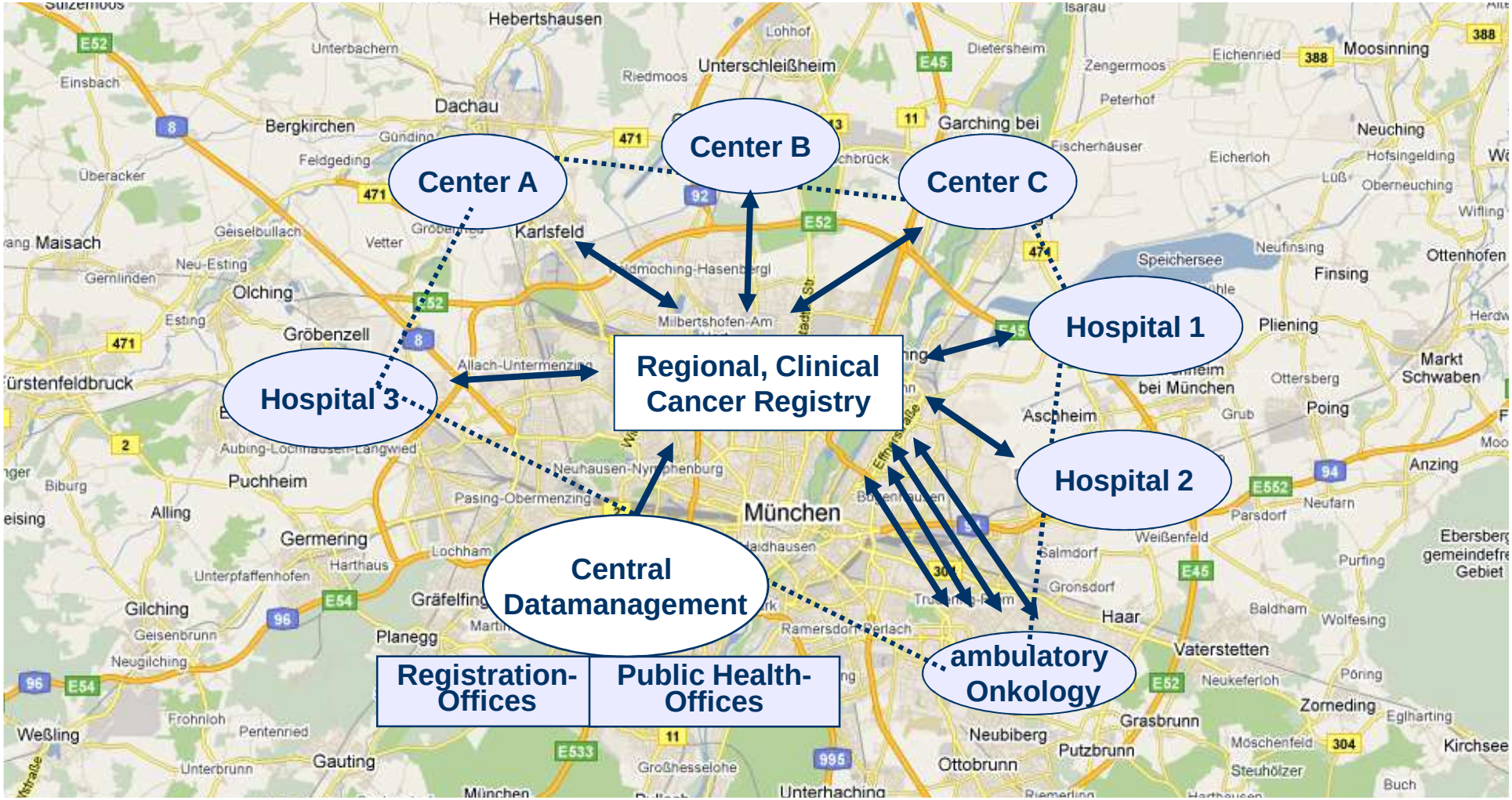
1. **Health Care during Course of Disease and Infrastructure for Support of Health Care**

2. **Feedback Systems, Quality Management, Benchmarking**

3. **Health Care Research**

Infrastructure for Support of Health Care

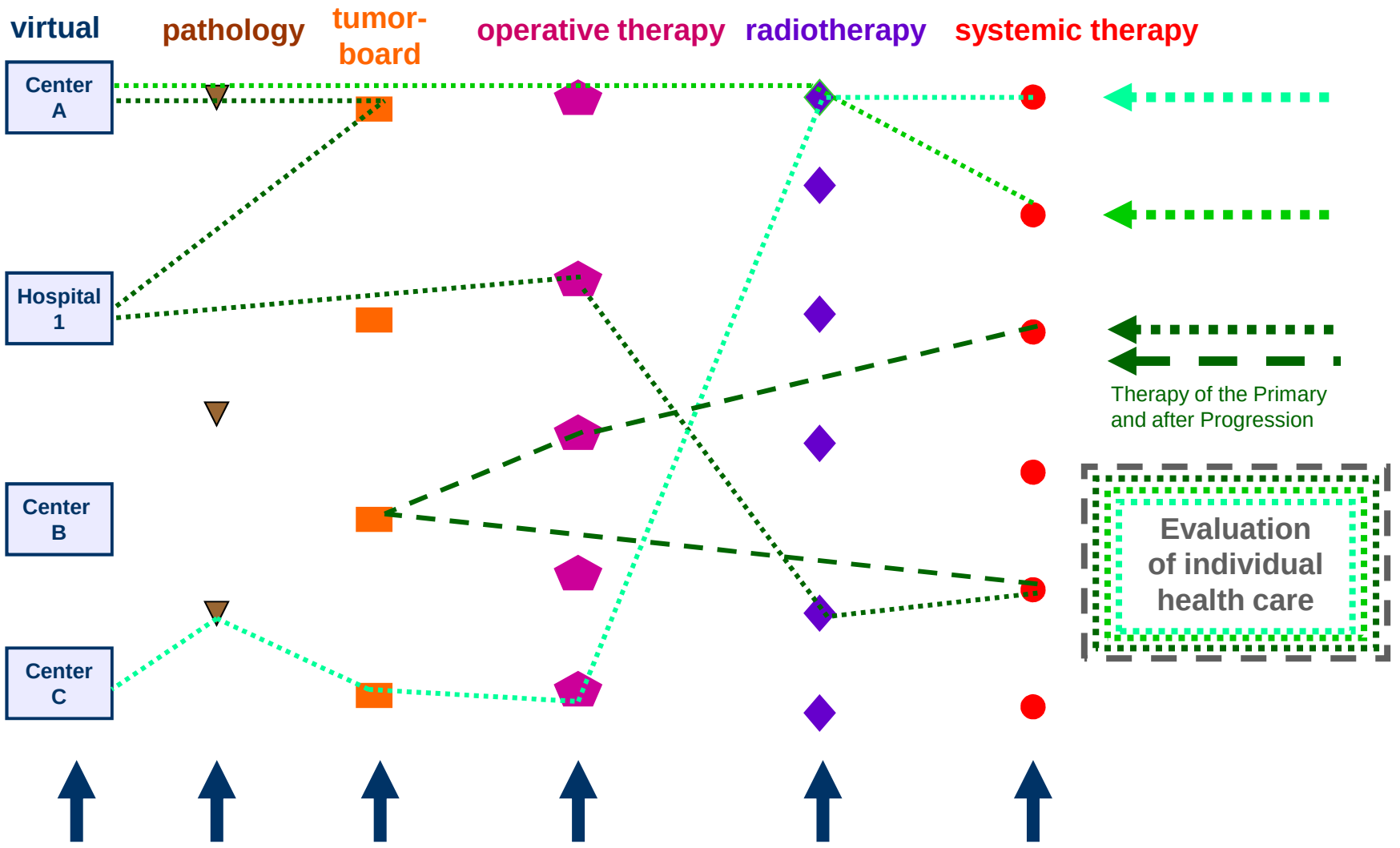
Interdisciplinary (multidisciplinary) and Intersectoral (inpatient/outpatient) Health Care



… accompanying the health care delivery for individual patients over years or decades

Infrastructure for Support of Health Care

Levels of health care, Stream of patients and Quality assurance



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Access to aggregated data (Examples)

Evaluation of cohorts of patients that received any therapy in a center / hospital …

Primary therapy:
- Operated in the center and adjuvant therapy in the center
- Operated in the center and adjuvant therapy outside
- Operated outside and adjuvant therapy in the center
- Therapy of relapse after “own” primary therapy
- Therapy of relapse after “outside” primary therapy
- Therapy of relapse outside after “own” primary therapy

Therapy during follow-up:
- Therapy of recurrences …
- Therapy of metastases …

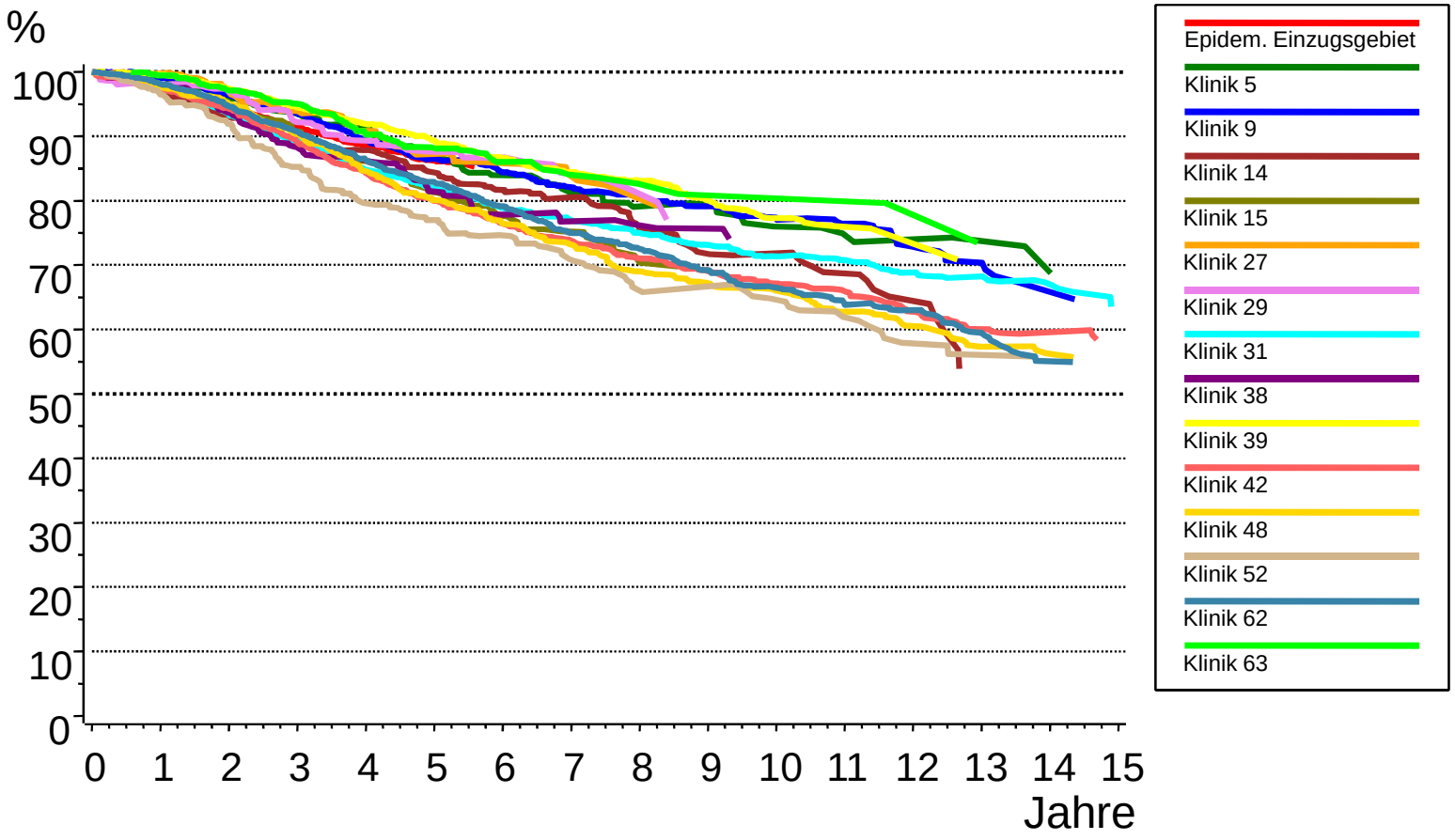
At the end is the demand for the meticulous documentation of all patients in order to adequately classifying cohorts.

The significance of documentation and a reasonable evaluation is often highly underestimated.

Feedback Systems, QM, Benchmarking

Munich Cancer Registry
Breast Cancer since 1988, n = 26.323

Relative Survival – Comparisons between Clinics (Benchmarking)



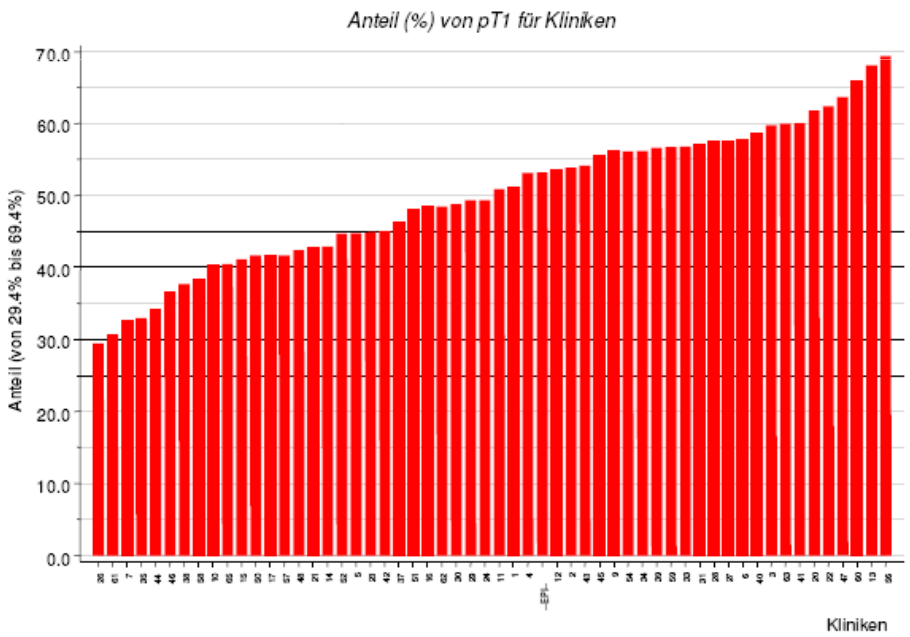
Feedback Systems, QM, Benchmarking

Munich Cancer Registry
Breast Cancer since 1988, n = 26.323

Comparisons between Clinics and between Pathology Institutes

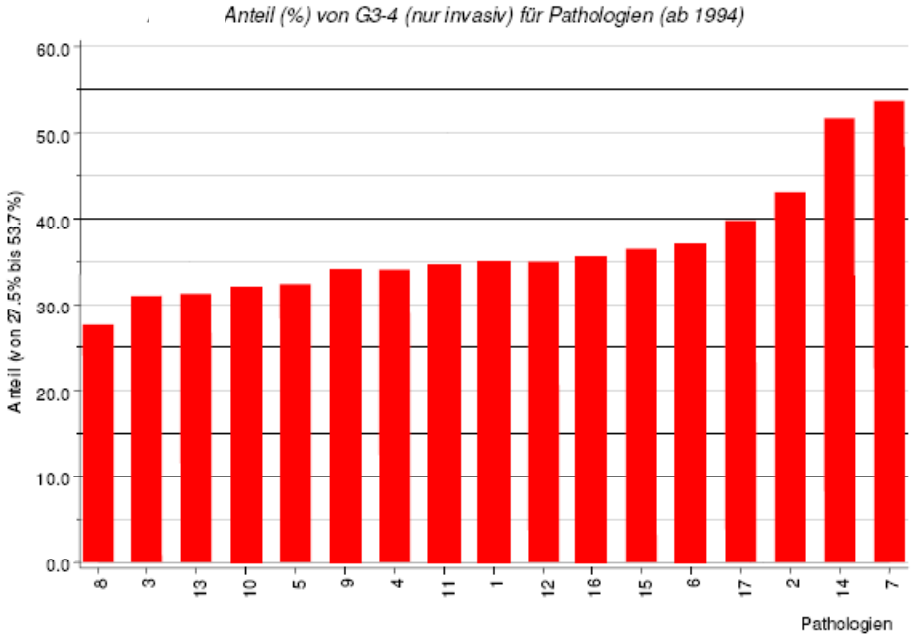
Proportion – % pT1 (Clinics)

(29,4 - 69,4%)



Proportion – % G3/4 (Pathology)

(27,5 – 53,7%)



Feedback Systems, QM, Benchmarking

Munich Cancer Registry
Breast Cancer since 1988, n = 11.622

Multivariate Analysis: Cox – Model

Relative Risk (RR) for classic prognostic factors

Relative Risk (RR) for each single clinic

Anzahl der Patienten in der Analyse: n = 1
davon verstorben: n = 2305

Signifikante biologische und therap. Einflussfaktoren		Relatives Risiko (RR)	95%-Konfidenz-intervall des RR	
Alter	< 50 Jahre	1,00	Referenz	p<0,0001*
	50-69 Jahre	1,09	0,97 - 1,22	
	>= 70 Jahre	2,76	2,45 - 3,11	
pT-Kategorie	pT1	1,00	Referenz	p<0,0001*
	pT2	1,51	1,37 - 1,67	
	pT3	2,16	1,81 - 2,57	
	pT4	2,91	2,50 - 3,38	
pN-Kategorie	pN0/X	1,00	Referenz	
	pN positiv	1,89	1,73 - 2,06	p<0,0001
Grading	G1/2	1,00	Referenz	
	G3	1,43	1,31 - 1,57	p<0,0001
Hormonrezeptor-Status	HR positiv	1,00	Referenz	
	HR negativ	1,59	1,44 - 1,76	p<0,0001
Radiatio	nein	1,00	Referenz	
	ja	0,73	0,67 - 0,80	p<0,0001

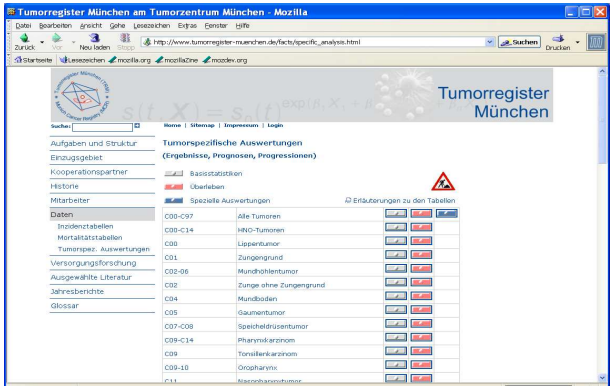
Kliniken	Relatives Risiko (RR)	95%-Konfidenz-intervall des RR	
K 0	0,87	0,74 - 1,03	p<0,1469*
K 5	0,82	0,63 - 1,07	
K 9	0,79	0,63 - 1,01	
K 14	0,85	0,69 - 1,04	
K 15	1,11	0,87 - 1,42	
K 16	1,09	0,81 - 1,48	
K 27	0,76	0,52 - 1,09	
K 29	0,82	0,57 - 1,18	
K 31	1,00	Referenz	
K 38	0,89	0,66 - 1,19	
K 39	0,81	0,69 - 0,94	
K 42	0,80	0,68 - 0,95	
K 48	0,88	0,67 - 1,15	
K 52	0,98	0,78 - 1,22	
K 54	0,89	0,64 - 1,23	
K 62	0,84	0,71 - 1,00	

Clinics: p=0,1469 not significant

* Simultan-Test n.s. nicht signifikant bei alpha=0,05

Feedback Systems, QM, Benchmarking

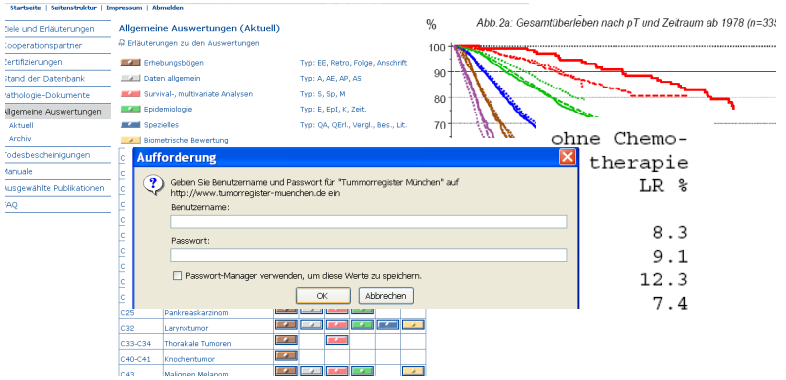
1



www.tumorregister-muenchen.de

for all

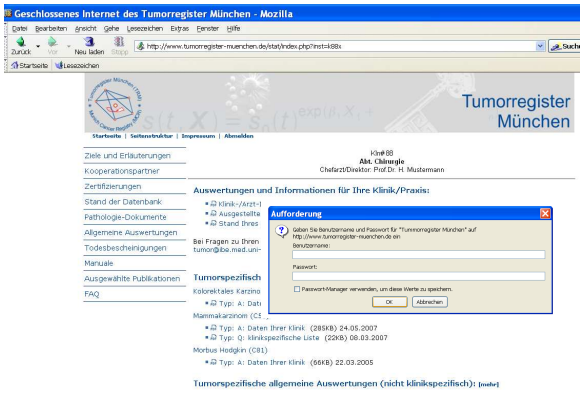
2



differentiated aggregated analyses

for „authorized“ interested parties

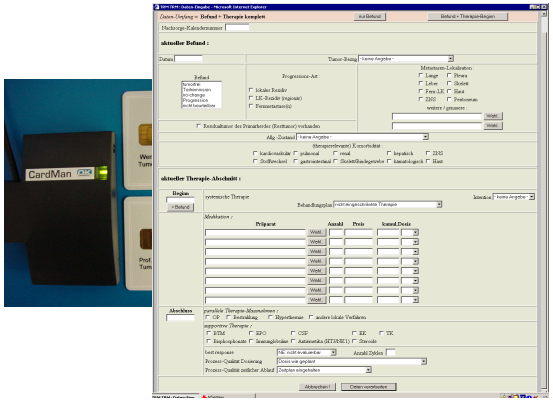
3



differentiated aggregated analyses
+ clinic specific analyses

for doctors and clinics only

4

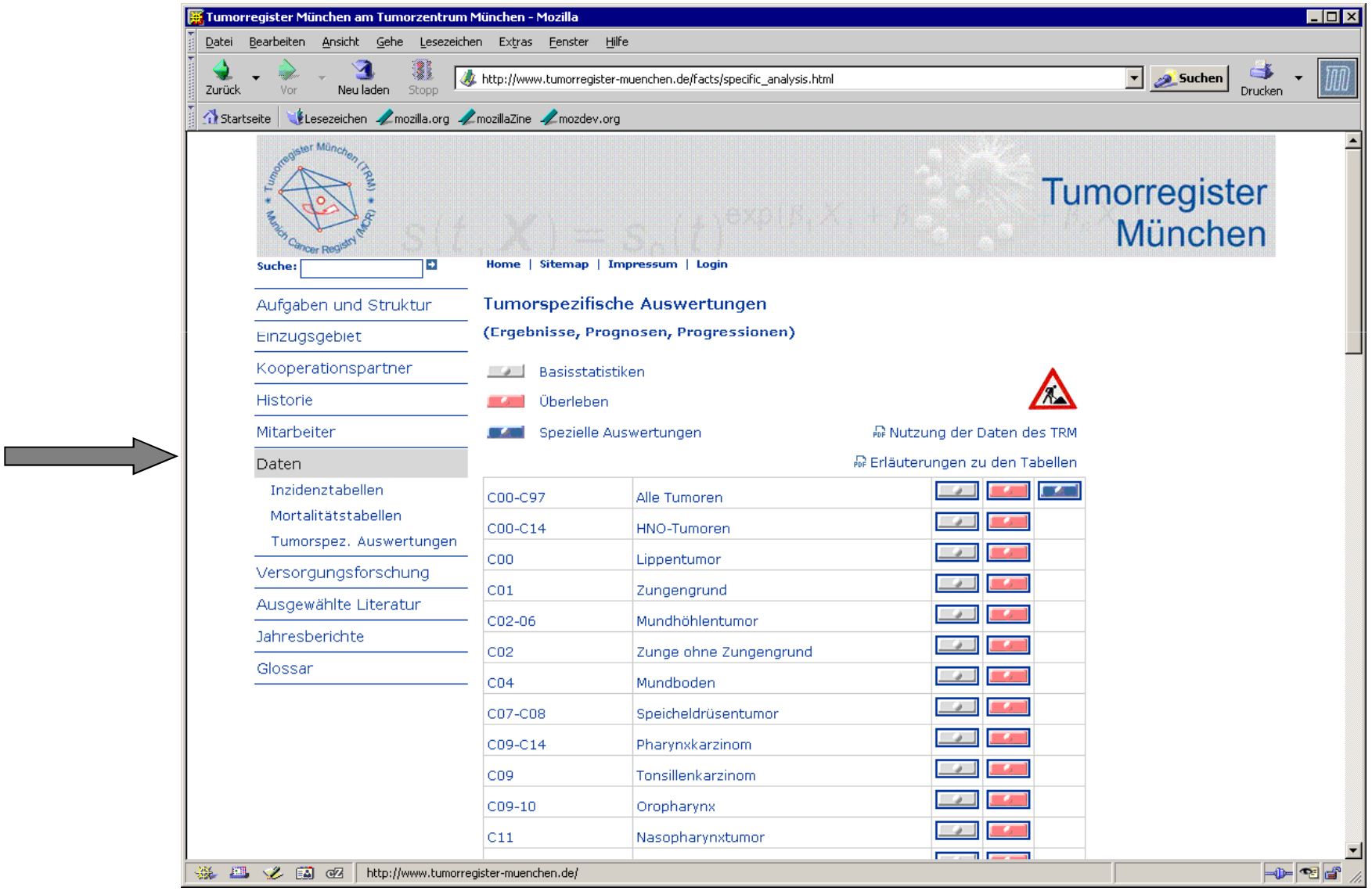


casuistics, queries of data,
online documentation

for doctors and clinics only

Feedback Systems, QM, Benchmarking

1. Internet (open access): www. tumorregister-muenchen.de



Feedback Systems, QM, Benchmarking

2./3. Internet (login with password only): www. tumorregister-muenchen.de

- Ziele und Erläuterungen
- Kooperationspartner
- Zertifizierungen
- Stand der Datenbank
- Pathologie-Dokumente
- Allgemeine Auswertungen
  - Aktuell
  - Archiv
- Todesbescheinigungen
- Manuale
- Ausgewählte Publikationen
- FAQ

Allgemeine Auswertungen (Aktuell)

Erläuterungen zu den Auswertungen

Erhebungsbögen	Typ: EE, Retro, Folge, Anschrift
Daten allgemein	Typ: A, AE, AP, AS
Survival-, multivariate Analysen	Typ: S, Sp, M
Epidemiologie	Typ: E, EpI, K, Zeit.
Spezielles	Typ: QA, QErl., Vergl., Bes., Lit.
Biometrische Bewertung	

C00-C97	Alle Tumoren
C03-C06	Mundhöhle
C07-C08	Speicheldrüse
C09-C10	Oropharynxkarzinom
C11	Nasopharynxkarzinom
C15	Ösophaguskarzinom
C16	Magenkarzinom
C18-C20	Kolorektales Karzinom
C22	Leberkarzinom
C23-C24	Gallenkarzinom
C25	Pankreaskarzinom
C32	Larynxtumor
C33-C34	Thorakale Tumoren

A: Daten aller Kliniken - Dec 2007
AE: Daten des epid. Einzugsgebiets - Dec 2007
AP: Daten aller Pathologien - Dec 2007
AS: Daten aller Strahlentherapien - Dec 2007
A(Rektum): Daten aller Kliniken - Dec 2007
AE(Rektum): Daten des epid. Einzugsgebiets - Dec 2007
A(Kolon): Daten aller Kliniken - Dec 2007
AE(Kolon): Daten des epid. Einzugsgebiets - Dec 2007

S: Survival Analysen - Mar 2008
M: Multivariate Analysen - Apr 2007

E: Epidemiologie - Feb 2008
Z: Zeittrend - Feb 2008

QErl.: Erläuterungen - Dec 2007
QA: Daten aller Kliniken - Dec 2007
V: Klinikvergleiche - Dec 2007

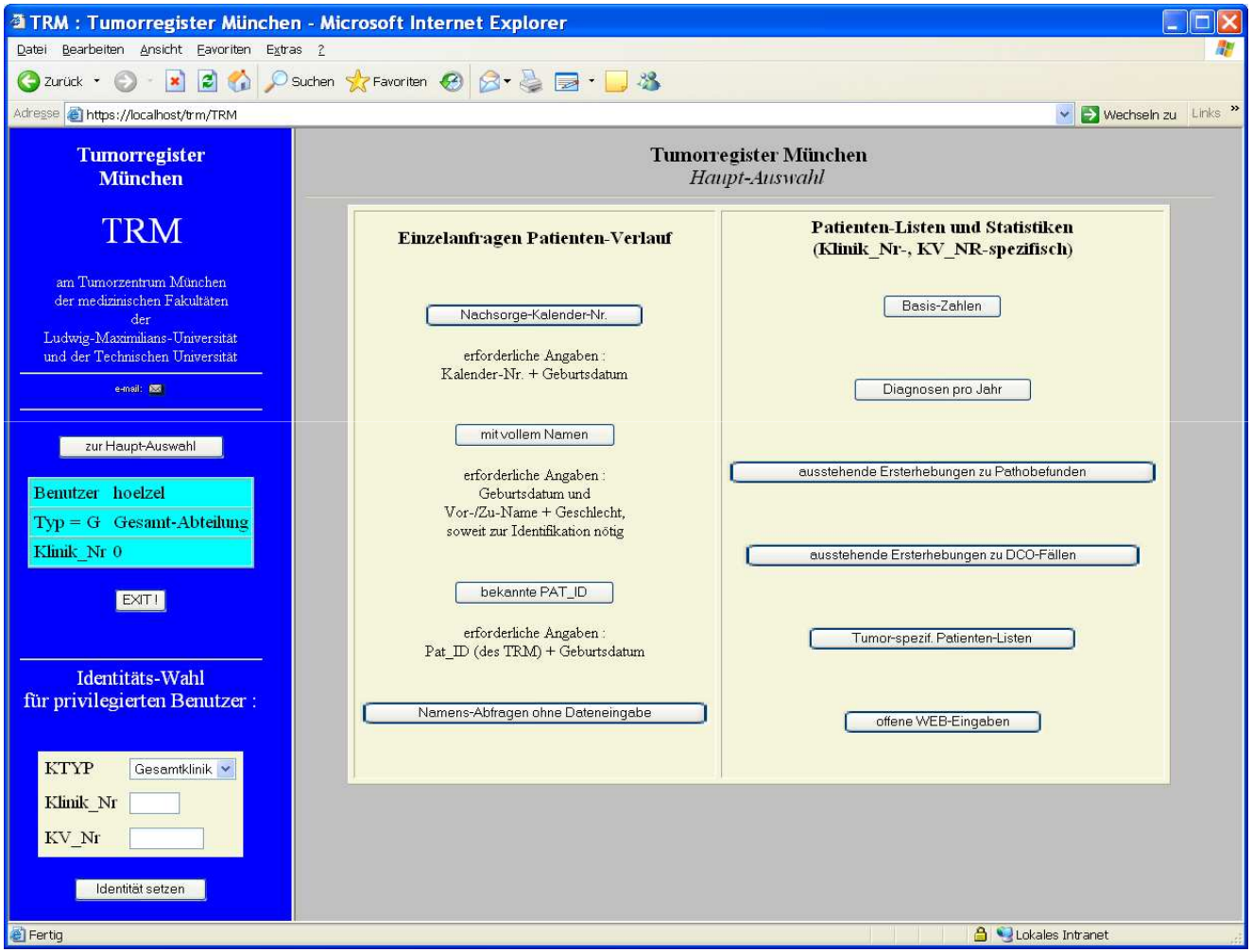
Benchmarking

multivariate Analyses

...

Feedback Systems, QM, Benchmarking

4. Intranet or Chipcard: Access to database / online documentation



Possibility for independent queries of specific cases or listings of patients groups for each clinic (about their own patients only)

… case-based learning is an interactive process …
The evaluation begins with a critical check of conspicuous casuistics.

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Health Care Research (Aspect I)

Formulate and prioritize research questions (Example: Lymph Node Dissection)

- All randomised clinical trials for different solid tumours have not shown any survival benefit of lymph node dissection (LND).
- Gene-expression analyses of the primary tumour allow a prognosis in LN negative and positive cases.
- Gene analyses predict the sites of metastasis.
- …

➔ „Seed and soil“ principle seems valid! Cell-characteristics of the primary tumour and the microenvironment are essential for a successful “metastasis”.

➔ The risk of metastasis arises from the primary tumour, not from secondary tumours (like local, regional or distant metastases)!

➔ A cascade-like progression model seems outdated.

Hypothesis for solid tumours: metastases do not metastasize!

Hypothesis for solid tumours: metastases do not metastasize!

If metastases do not metastasize, then positive lymph nodes, as an example of regional metastases, also do not metastasize and therefore the benefit of LND is questionable.
If any LND is questionable then also the sentinel technique is questionable.

The Breast (2006) **15**, 451–454

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SHORT REPORT

Are we wasting our time with the sentinel technique? Fifteen reasons to stop axilla dissection

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Health Care Research (Perspectives)

Activities and efforts:

Volume

Guidelines

Tumor boards

Breast Disease Centers

Impact on (?):

Structure of Care

Process of Care

Outcome

Several responsibilities of Health Care Research

Summary

The role of cancer registries is, among others:

Cancer registries …

… can manage and contribute valuable data to support the health care delivery system in an increasingly complex network

… can provide sensible evaluations regarding quality assessment

… can help to formulate and prioritize research questions

… can monitor whether activities and efforts (like the establishment of Breast Disease Centers) are implemented into practice and have impact on the outcome.

Thank you very much for your attention!

Mercy beaucoup pour votre attention!