"אנחנו עובדים יפה כאן, האומנם"?
רעיון למחקר ניהולי בתחום סרטן ריאות

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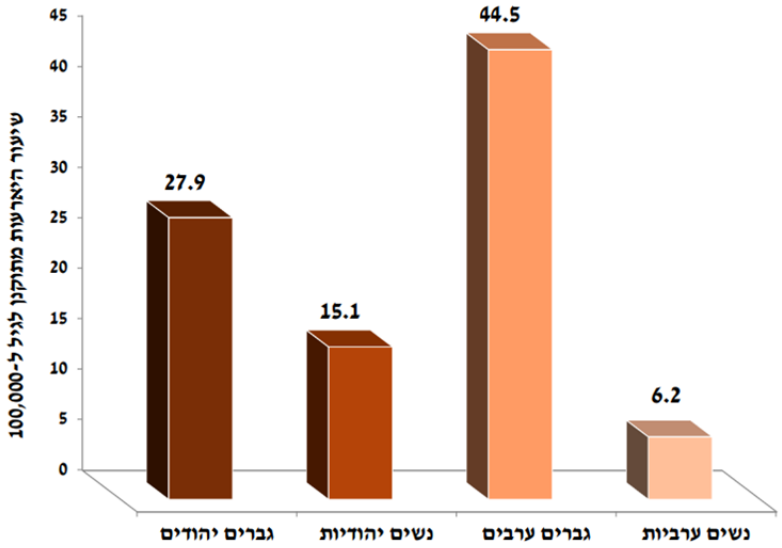
Lung Cancer In Israel

שיעורי ההיארעות של סרטן הריאה, 2012



סרטן הריאה

- הגידול השלישי בשכיחותו בישראל בגברים והן בנשים
- הראשון בשכיחותו בגברים ערבים
- מאד לא שכיח בנשים ערביות
- 2,279 חולים חדשים בשנה
  - 64% גברים
  - 36% נשים

Lung Cancer Diagnostic Delays - is it important?

No definitive evidence!

Intuitively: delay = opportunity for upstaging

Delay = psychological distress

Doubling times depend on pathology, most data on small nodules

Lung cancer screening LDCT shown to reduce lung cancer-related mortality

But: diagnostic time is a short period between oncogenesis and death

What is the standard of care?

RAND Corp (US) 2000 - < 2 months from suspicion to diagnosis

UK NICE 2005 - refer within 2 weeks for CXR (!)

"Recommendations' = no evidence base

Fed Prac 2020 : USA Median 35 days

Br J Cancer 2014; UK lung cancer median time to diagnose 112 days -> 114 days

Path Oncol Res 2021: Hungarian Registry time to diagnosis 63 days, increased to 68 days

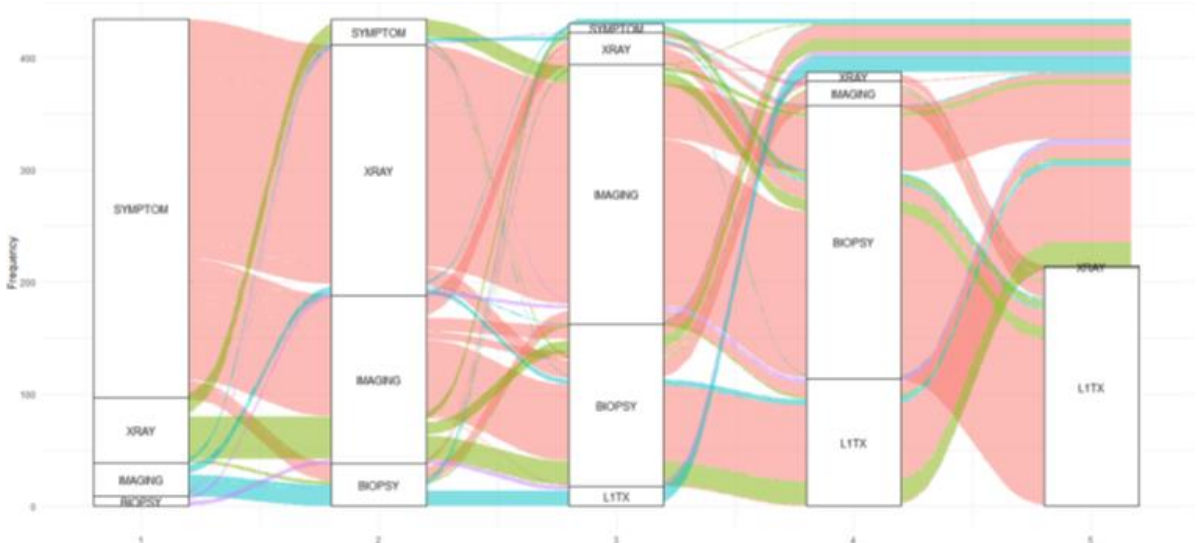
Israel – data from Maccabi (Cancer Epid 2022)

- Mapping of progress from symptom to first oncological treatment
- Stage IV NSCLC
- N 434
- Median 7.76 months from symptom to treatment
- Diagnostic time imaging to treatment approx ~ 2.3 months
- 21% never received therapy
    - Older, worse ECOG, smokers, longer time symptomatic

Table 4

Pathways table between different junctions in the diagnostic pathway from first symptom report to 1 L treatment initiatio
those that had the initial event (not everyone had each event), and patients that had the outcome event prior to the init
supplementary table 6 for summary of how many patients had each intervention.

		N	Events, n (%)	Median time (95% CI)
Time from first symptom to imaging	Untreated patients	71	71 (100.00%)	6.51 (4.24, 7.33)
	Treated patients	285	285 (100.00%)	3.48 (2.76, 4.34)
Time from imaging to biopsy	Untreated patients	87	87 (100.00%)	0.59 (0.43, 0.92)
	Treated patients	301	301 (100.00%)	0.56 (0.46, 0.66)
Time from biopsy to 1 L treatment initiation		433	344 (79.45%)	1.78 (1.71, 1.91)
Time from first symptom to 1 L treatment initiation		368	296 (80.43%)	7.76 (6.51, 8.75)



Lung Cancer @ Shamir

150-200 cases / year

Rapid Access Clinic

- Appointment w pulmonary <72 hours
- Short wait times for procedures
- Relationships w CT-PET / radiology
- Quick Pathology Lab, "in-house" molecular oncology
- Functional MDT (pulm, thoracic surgery, onco, radiol, path)

Are we as good as we think we are?

"Self-Serving Bias"

We attribute good outcomes to ourselves and bad outcomes to external factors.

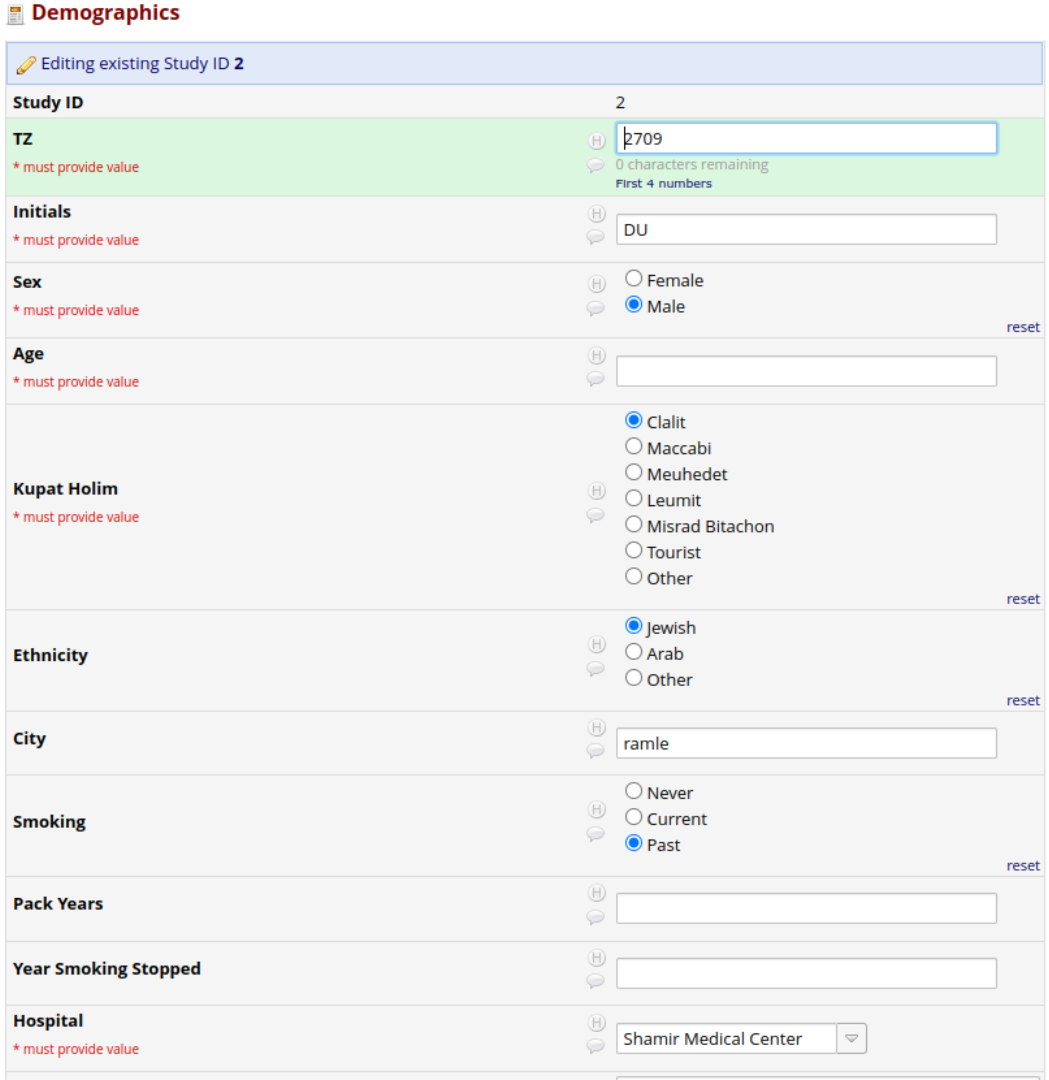
Research Project

REDcap Database

Demographic data

Timeline of Events

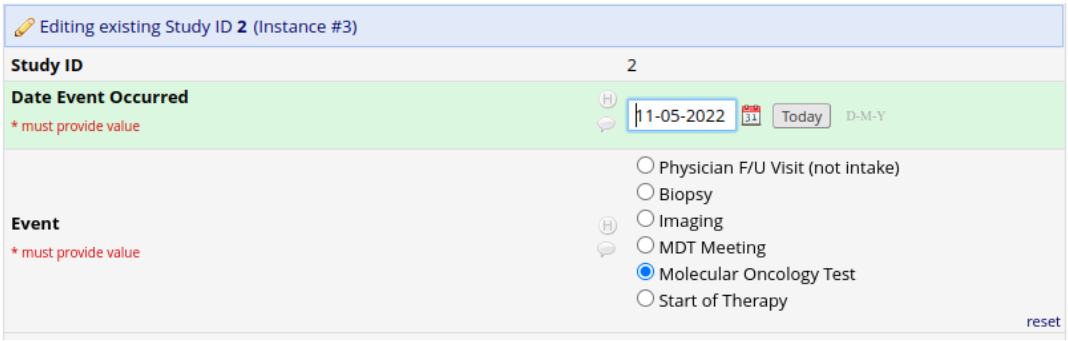
Try to minimize data burden

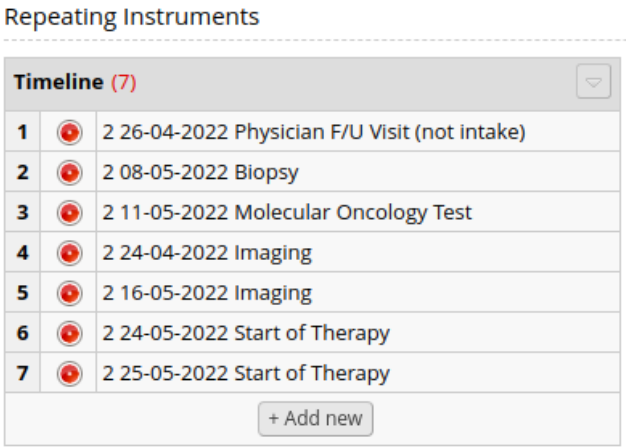


Flexible Timeline Events Design

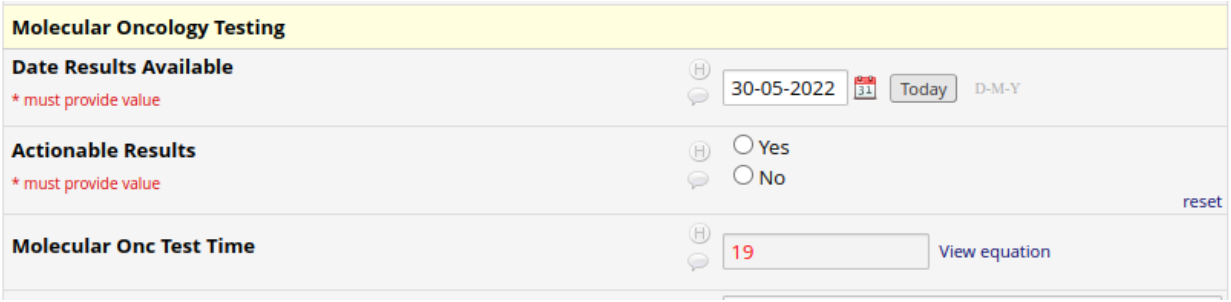
Each patient's journey is different

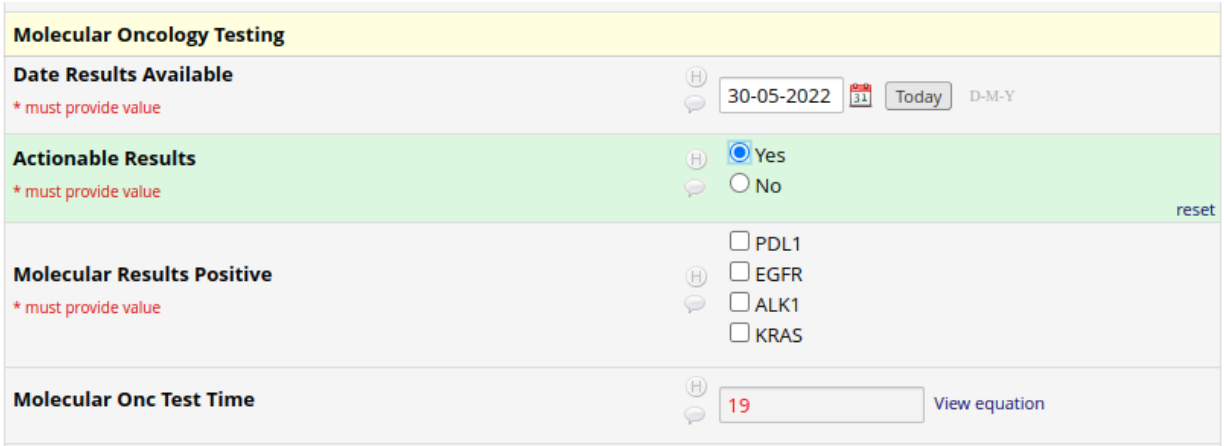
User adds events as required





Events Use Conditional Logic





Primary Outcome "Medical"

Time Referral-to-specific therapy (days)

- Surgery
- First specific oncological therapy

Overall Survival

- Doubtful to find an effect…

Secondary Endpoints "Management"

Subsets of diagnostic time

- Referral-to-intake-visit time
- Referral-to-diagnostic-biopsy time
- Kupat-Holim Time (First CT result to referral)

Learn lessons - where can we improve?

What working processes can be managed differently?

How is our documentation?

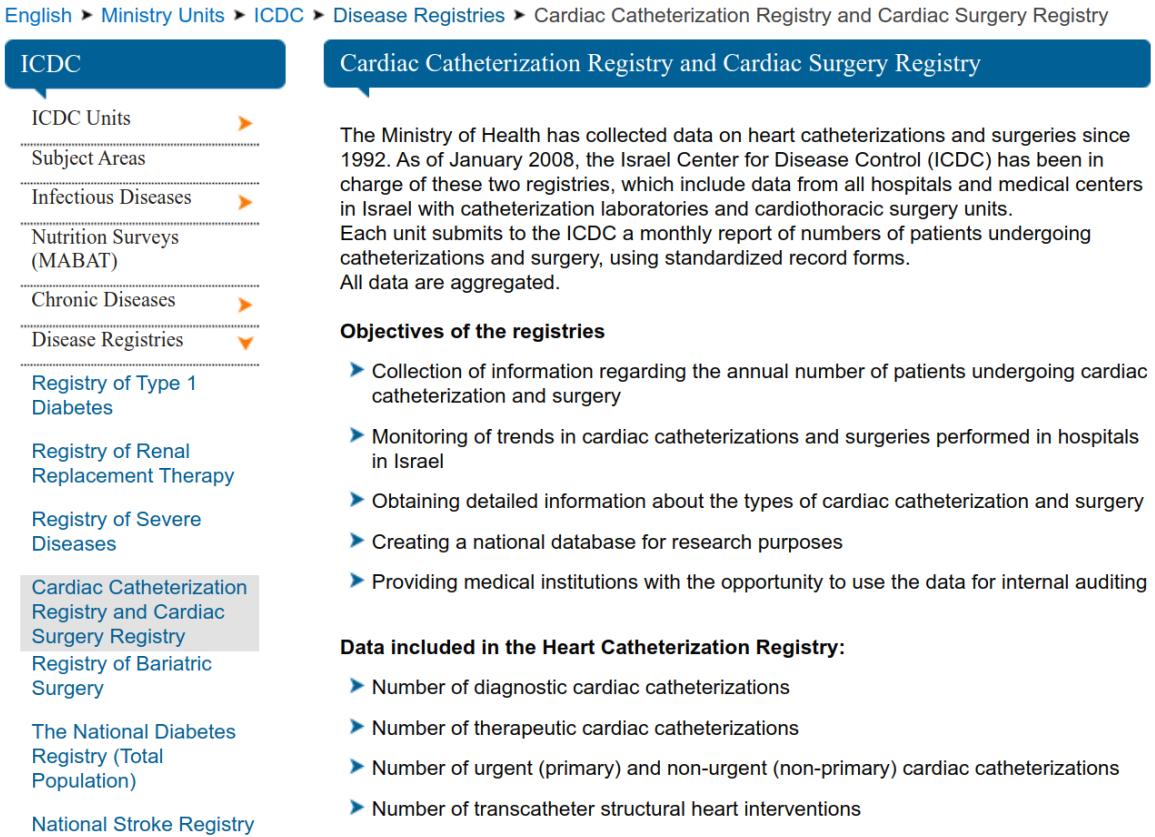
Scientific Value

Relatively small literature

Israel Cardiac Cath Registry

30 years old project

Many many papers…



English ➤ Ministry Units ➤ ICDC ➤ Disease Registries ➤ Cardiac Catheterization Registry and Cardiac Surgery Registry

ICDC

- ICDC Units
- Subject Areas
- Infectious Diseases
- Nutrition Surveys (MABAT)
- Chronic Diseases
- Disease Registries
  - Registry of Type 1 Diabetes
  - Registry of Renal Replacement Therapy
  - Registry of Severe Diseases
  - Cardiac Catheterization Registry and Cardiac Surgery Registry
  - Registry of Bariatric Surgery
  - The National Diabetes Registry (Total Population)
  - National Stroke Registry

Cardiac Catheterization Registry and Cardiac Surgery Registry

The Ministry of Health has collected data on heart catheterizations and surgeries since 1992. As of January 2008, the Israel Center for Disease Control (ICDC) has been in charge of these two registries, which include data from all hospitals and medical centers in Israel with catheterization laboratories and cardiothoracic surgery units.
Each unit submits to the ICDC a monthly report of numbers of patients undergoing catheterizations and surgery, using standardized record forms.
All data are aggregated.

Objectives of the registries

- Collection of information regarding the annual number of patients undergoing cardiac catheterization and surgery
- Monitoring of trends in cardiac catheterizations and surgeries performed in hospitals in Israel
- Obtaining detailed information about the types of cardiac catheterization and surgery
- Creating a national database for research purposes
- Providing medical institutions with the opportunity to use the data for internal auditing

Data included in the Heart Catheterization Registry:

- Number of diagnostic cardiac catheterizations
- Number of therapeutic cardiac catheterizations
- Number of urgent (primary) and non-urgent (non-primary) cardiac catheterizations
- Number of transcatheter structural heart interventions

Delusions of Grandeur

Start small, see what we learn in a local pilot…

If multiple centers participate we can find examples of ‘best practice’ and duplicate good service delivery models.

Multiple centers = multiple papers
“Research Group” model

Discussion