



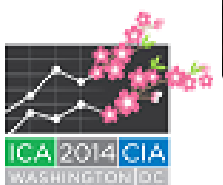
LEARN  
INTERACT  
GROW

# The importance of Big Data to the L&H insurance industry

SWISS RE  
**150**  
YEARS

Daniel Ryan, Swiss Re

# Our Brave New World



# Who knows what about me?



MARKS & SPENCER

Married for 17 years



Father of 2



Age: 42



Swiss Re



TOWERS WATSON



CACI



YouTube



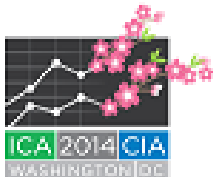
SN8 2DD



Google



toptable



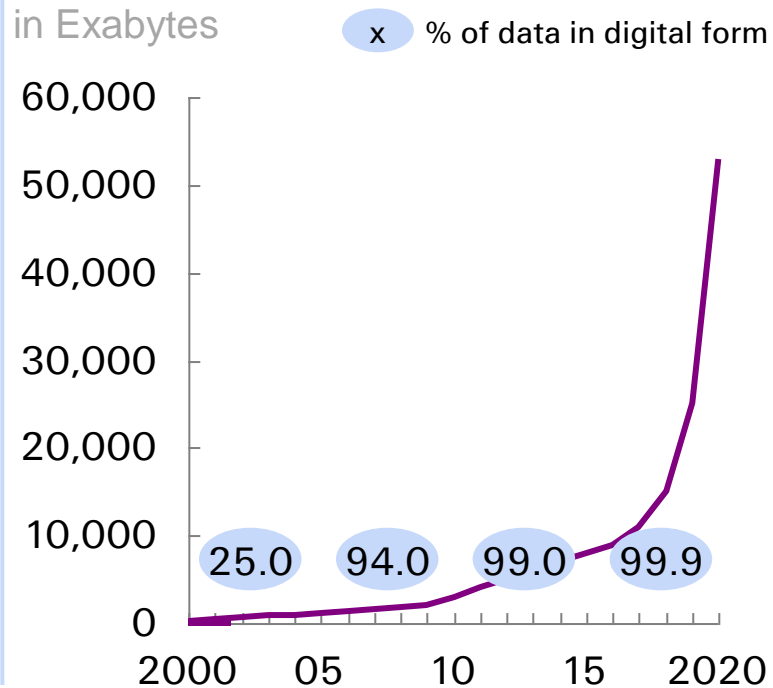


# Big Data & Smart Analytics – here and now

## Big Data & Smart Analytics are about:

- Creating and extracting information from large amounts of available data (internal and external)
- Applying innovative approaches/methodologies in analysing available data to expand the reach of knowledge and customer insights

## Data availability is increasing exponentially



Source: eMarketer, Forrester, Internet World Stats, IBM, The Economist

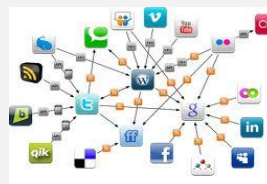
## Examples



*Over 10 billion devices are connected to the Internet and continuously more devices are equipped with communication interfaces*



*83% of IT Executives see Smart Analytics and Big Data as part of their strategic vision*



*80% of all data is unstructured, only 20% of available data are leveraged from traditional systems*



# The pace of change is affecting our daily lives



- People are open to receiving other useful information
- People are more open to be engaged
- People want to control the frequency and content
- People want direct access to service tools

As the communication style and etiquette changes, so does the message.

## 15. J's burning question:



J [redacted]  
how did people no what roads to take before google maps was made??  
Like · Comment · 3 minutes ago · ✖



H [blue redacted] They used maps.  
50 seconds ago · Like · ↻ 1



J [redacted] wat?? no i said before google maps  
12 seconds ago · Like

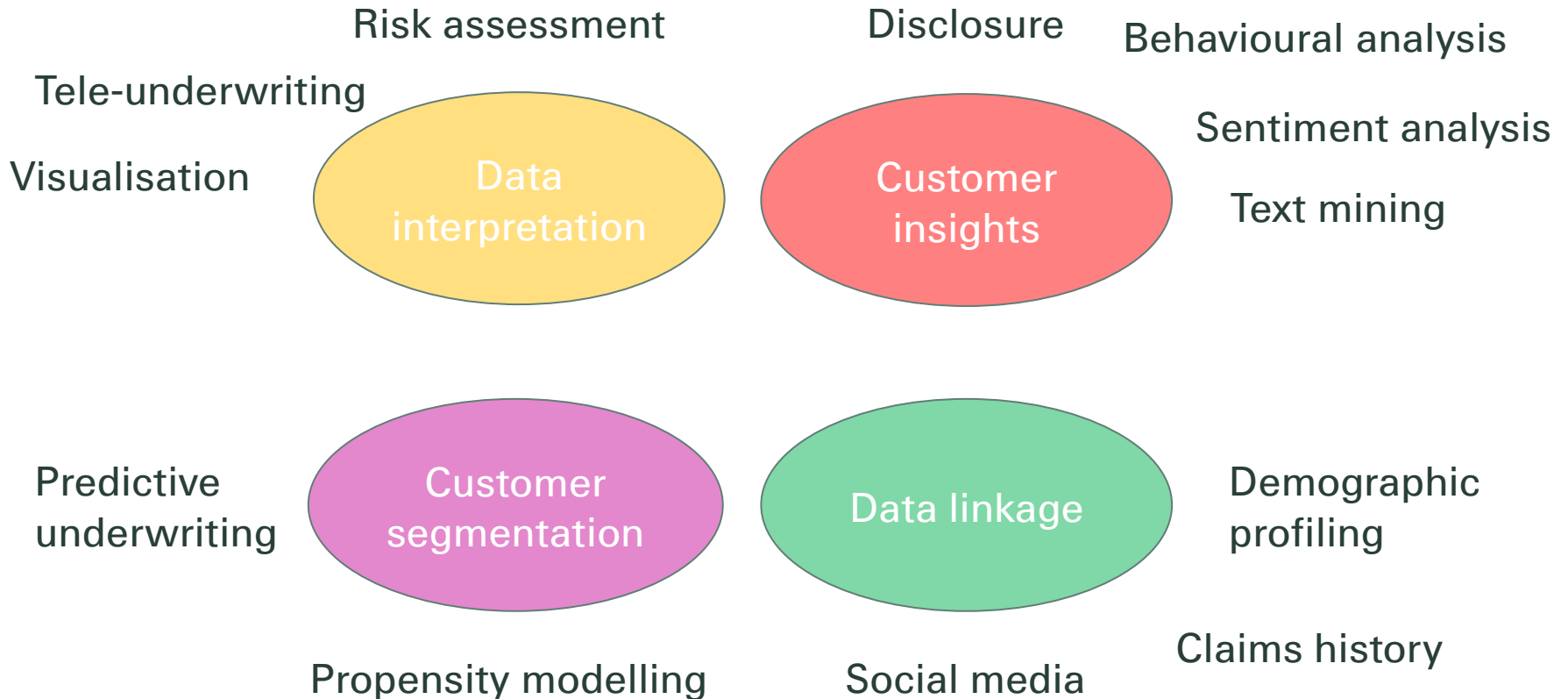
# It's not just about analysing the data

- Data analytics is a part of Big data but it is the value added from the insights that create commercial value
- (Re)Insurers should offer strong data analytics capabilities, but enhanced value derived from our entire product suite
- Think about collection, access and delivery of data and value
- Products will need to be changed/enhanced/redesigned

# Big Data applications for Life & Health



# Learnings from Big Data for Life & Health





# Traditional approach to underwriting

- Importance of medical cohort studies focused on primary condition
- Use of own experience to calibrate and estimate socio-economic differences
- Modification for severity of condition and extent of treatment and/or control
- Multiple or addition to mortality, trending at older ages
- Allowance for anti-selection
- Accept, rating, postpone or decline

# Unlocking potential of predictive underwriting

- Intelligent use of non-medical data held on consumers to estimate health status
- Reduce amount of traditional underwriting where existing data rich relationship in place

*"You haven't applied for protection, but based on what we know about you, we will pre-approve you and make you an offer"*

- Alternatively, predictive techniques can enable you to triage the underwriting process

*"Now you are applying for protection, let's run some data on you to remove certain tests, and speed up the process"*

# Building a predictive model

- Any information held on a customer **could** be predictive of their health status – let the data do the talking
- Combining all the predictive variables, an algorithm is built that ranks each customer from worst to best prospect, in terms of "likelihood of being given standard rates at application stage"

→ Probability of being a bad risk =  $1/(1+e^{-y})$

$$y = a+bx_1+cx_2-dx_3+ex_4+fx_5+gx_6+hx_7-ix_8+jx_9-kx_{10}-lx_{11}+.....+$$

where:

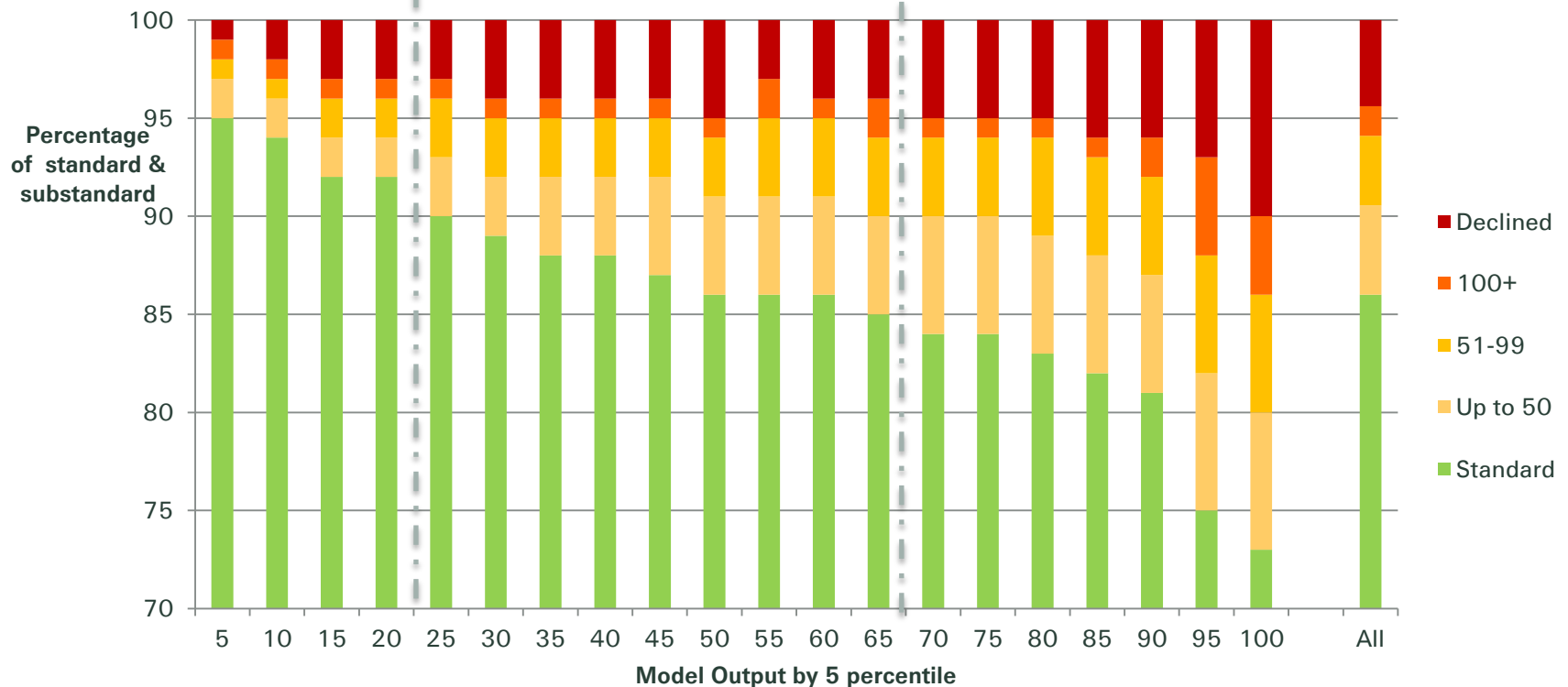
$x_1$	is age related
$x_2$	is related to value of home
$x_3$	is a brand identifier
$x_4, x_5, x_7$	are related to occupation
$x_6, x_9, x_{11}$	are account activity related
$x_8, x_{10}$	are neighbourhood / community related



# What might we learn from the model?

Fictional model output

Cut-off could be set anywhere within this range



This tells us, for example, that the top 5% of the model contains a "rated or decline" rate of 5%, as opposed to 14% were no model built (see "All" column)



# A case study of predictive underwriting in UK



- Swiss Re built model on banking data held on 90,000 Aviva underwriting policies
- Top 20% of banking customer base can be "pre-approved" for a 1-question life insurance offer
  - confirm not been diagnosed with cancer or diabetes
- Direct Mail pilot in Nov 2013 proved the concept & process
- Key win is for the sales agent, who really like the proposition
  - sales over the phone fell from 90mins to 15mins
- Further DM / Telemarketing activity for May – with revised marketing message & improved process
- In-branch pilot in Q2 in selected number of branches
  - Model re-fresh based on up-to-date data (first model was based on 2008 data)
- Aviva UK replicating the success with other Strategic Partners





# Value of predictive analytics to L&H Industry

## Predictive Analytics

Two key questions:

1) what do I want to predict? 2) what data do I have access to?

### Predicting Purchase

### Predicting Health

### Predicting lapse

Past purchase data available?

No past sales data?

Do you want to reduce underwriting for the best prospects?

Do you want to charge different prices?

Do you want to differentiate medical requirements?

Past data available on lapsed/non-lapsed customers?

No past data available?

Build a propensity-to-buy model, which will identify the best prospects for marketing efforts

Trigger events can be used (e.g. house move, birth of a child, birthday)

Full Predictive Underwriting – requires past match-able underwriting & descriptive data (e.g. bank)

Model built on mortality/underwriting data/experience - customers placed in different risk bucket

Model selects customers at lowest/highest risk of needing medical tests (e.g. fluids, cotinine)

Propensity-to-lapse model is built, in order for best products to be sold to, or to direct retention efforts

General learnings (e.g. Swiss Re lapse experience) used as starting point (e.g. age/smoker differences)



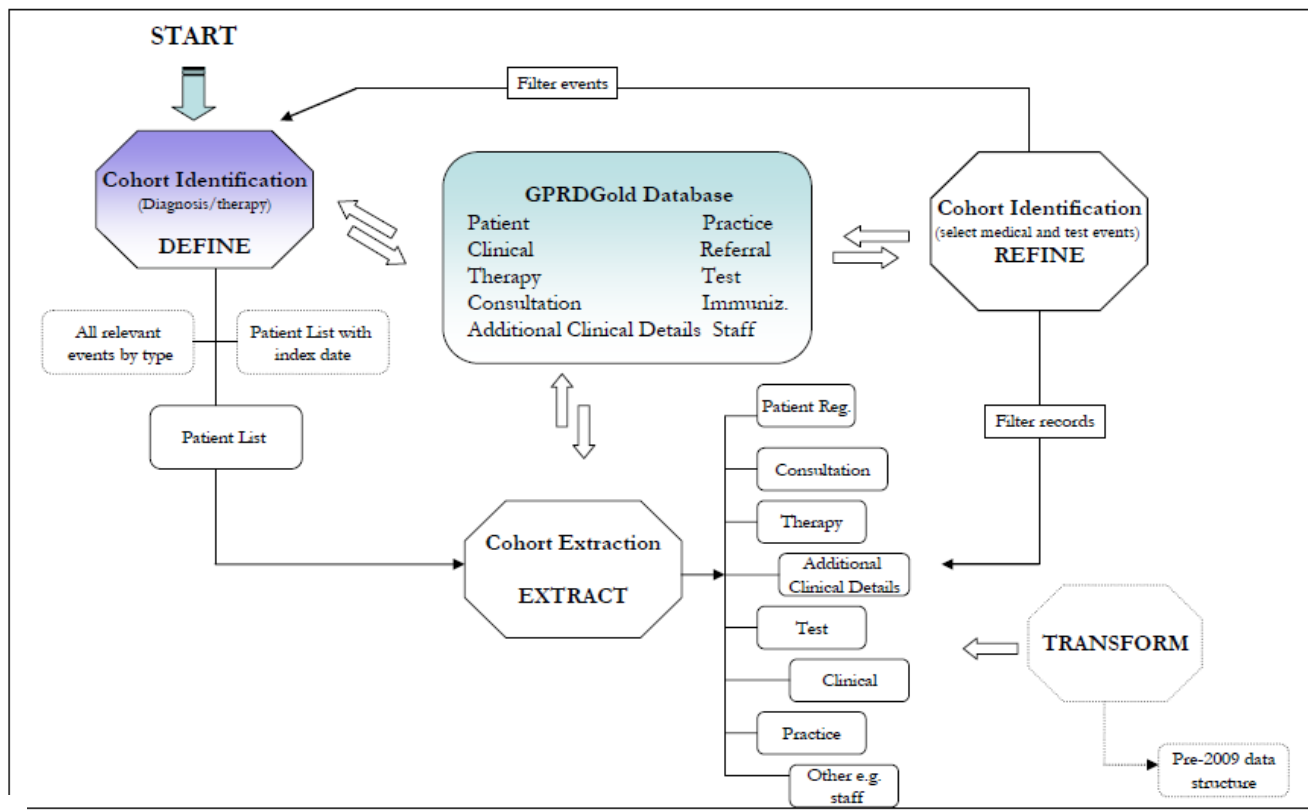
# Datasets – old friends & new possibilities



# General Practice Research Database



## GPRDGold Suite of Tools

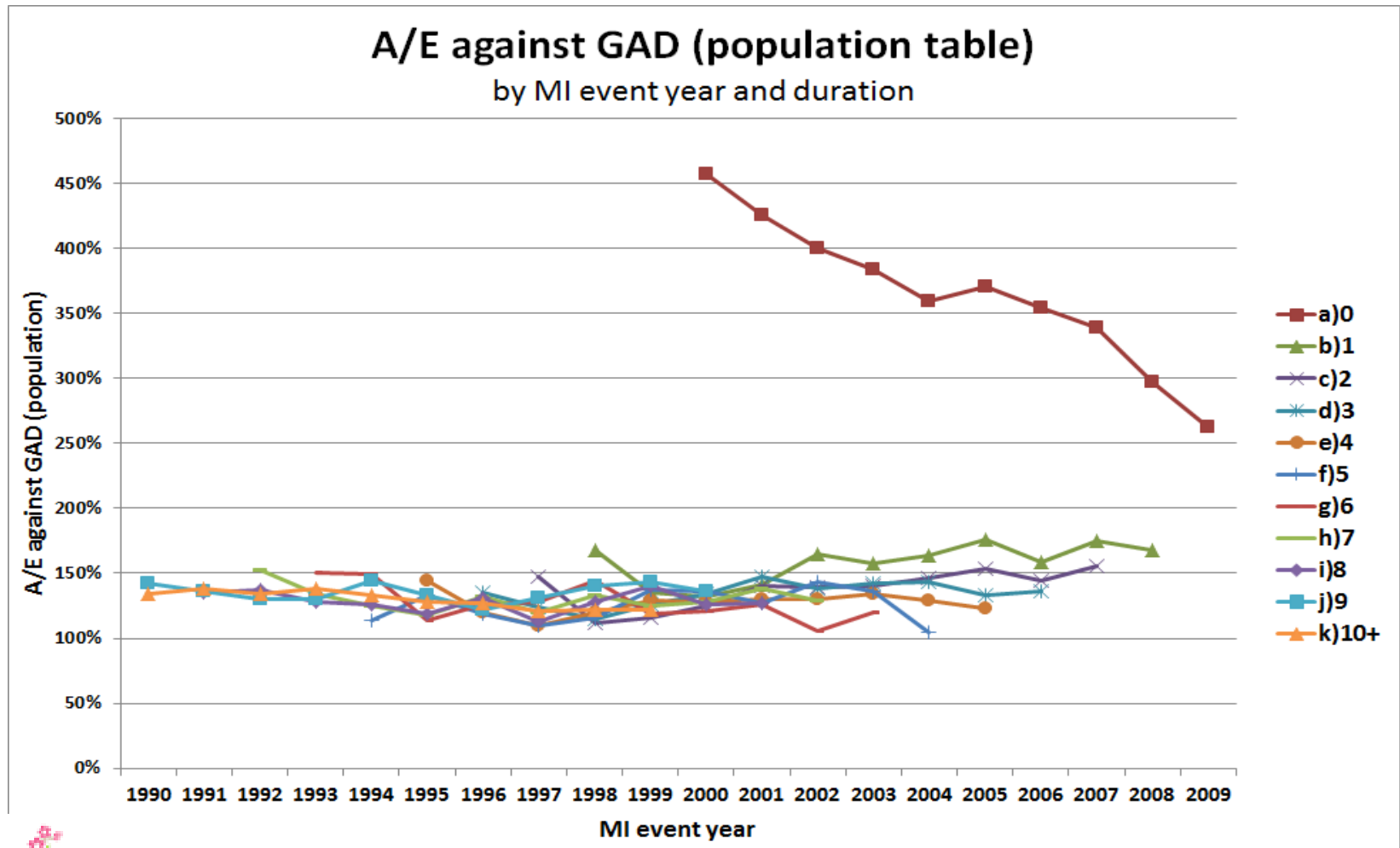


Crown Copyright 2010



# Mortality experience - myocardial infarction

## GPRD data split by duration since incidence



# PREDICTIVE MEDICINE GROUP

Common data,  
Uncommon predictions

Predmed.org

Ben\_Reis@Harvard.edu

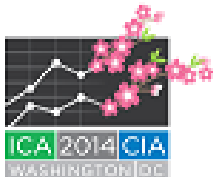
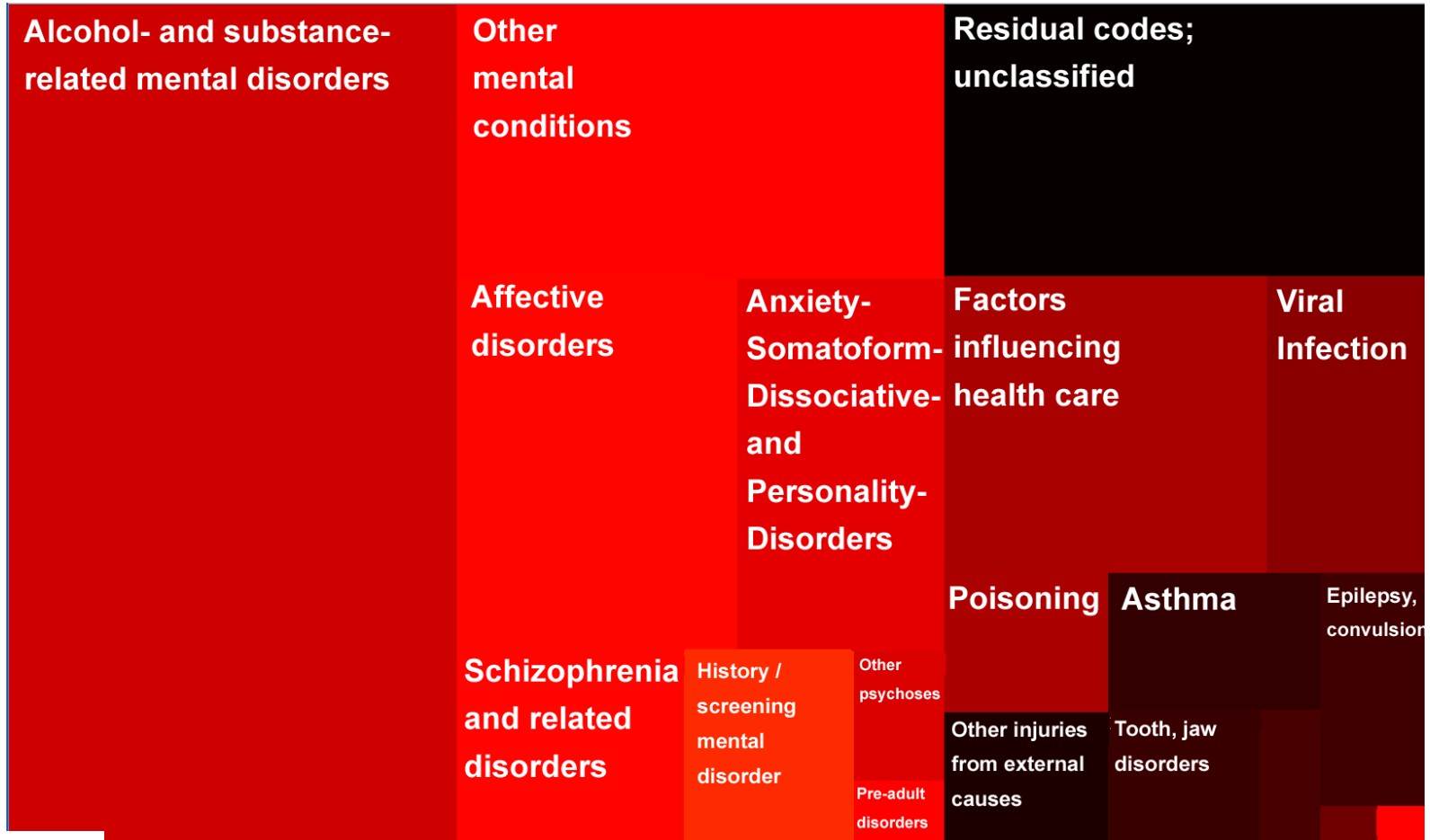


# Working with records held by health insurers

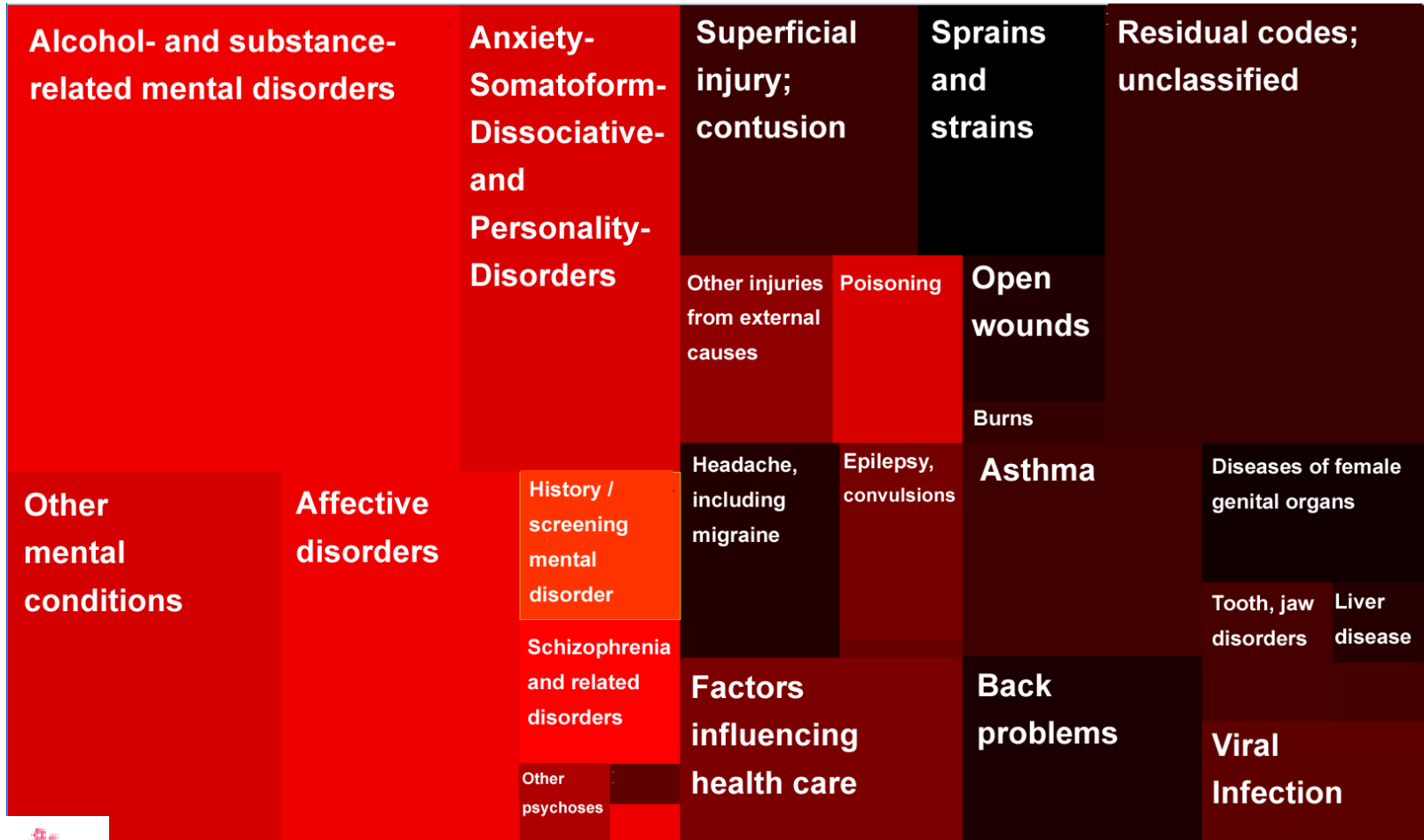
13-Oct-87	13:33:00	3	ABDOMINAL PAIN	53190	GASTRIC ULCER NOS
6-May-88	11:49:27	71	RESPIRATORY DISTRESS	49390	ASTHMA W/O STATUS ASTH
9-Nov-88	18:34:23	40	INJURY - HAND (FINGERS)	81501	FX 1ST METACARP BASE-CL
16-Feb-89	17:54:09	26	EARACHE	3829	OTITIS MEDIA NOS
16-Feb-89	17:54:09	26	EARACHE	3099	ADJUSTMENT REACTION NOS
16-Feb-89	17:54:09	26	EARACHE	5355	GASTRITIS/DUODENITIS NOS
16-Jan-90	17:16:00	40	INJURY - HAND (FINGERS)	92320	CONTUSION OF HAND(S)
28-Feb-90	22:24:00	40	INJURY - HAND (FINGERS)	92320	CONTUSION OF HAND(S)
7-Mar-90	18:13:00	40	INJURY - HAND (FINGERS)	92320	CONTUSION OF HAND(S)
7-Apr-90	14:55:58	93	OTHER	7890	ABDOMINAL PAIN
10-Apr-90	15:53:54	20	DEHYDRATION	7999	UNKN CAUSE MORB/MORT NEC
12-Apr-90	17:22:17	20	DEHYDRATION	2765	HYPOVOLEMIA
27-Apr-90	10:47:39	46	INJURY - HEAD	3469	MIGRAINE NOS
5-Oct-90	12:33:49	3	ABDOMINAL PAIN	5301	ESOPHAGITIS
11-Oct-90	9:16:58	40	INJURY - HAND (FINGERS)	92320	CONTUSION OF HAND(S)
9-Nov-90	19:02:57	37	INGESTION	9899	TOX EFF NONMED SUBST NOS
21-Dec-90	19:27:00	3	ABDOMINAL PAIN	5355	GASTRITIS/DUODENITIS NOS
29-Jan-91	21:39:10	40	INJURY - HAND (FINGERS)	6829	CELLULITIS NOS
1-Feb-91	13:25:11	112	CELLULITIS	6829	CELLULITIS NOS
18-Feb-91	15:50:19	40	INJURY - HAND (FINGERS)	6824	CELLULITIS OF HAND
21-Feb-91	20:51:51	93	OTHER	7890	ABDOMINAL PAIN
21-Feb-91	20:51:51	93	OTHER	0799	VIRAL/CHLAMYD INFECT NOS
2-Apr-91	10:57:49	51	INJURY - KNEE	8362	TEAR MENISCUS NEC-CUR
13-May-91	3:13:56	57	LACERATION	87343	OPEN WOUND OF LIP
7-Jul-91	14:28:34	45	INJURY - EYE	920	CONTUSION FACE/SCALP/NCK
7-Sep-91	17:05:00	79	SUICIDE ATTEMPT	3009	NEUROTIC DISORDER NOS
8-Sep-91	12:24:55	100	FOLLOWUP VISIT/RECHECK	88102	OPEN WOUND OF WRIST
8-Sep-91	12:24:55	100	FOLLOWUP VISIT/RECHECK	V588	AFTERCARE NEC
6-Nov-91	18:48:29	40	INJURY - HAND (FINGERS)	81601	"FX MID/PROX PHAL
7-Nov-91	18:31:50	40	INJURY - HAND (FINGERS)	81500	FX METACARPAL NOS-CLOSED
23-Mar-92	16:28:17	27	EDEMA/SWELLING	7823	EDEMA
23-Jul-92	17:44:00	23	DIARRHEA	0090	INFECTIOUS ENTERITIS NOS
23-Jul-92	17:44:00	23	DIARRHEA	5301	ESOPHAGITIS
9-Aug-92	20:23:07	57	LACERATION	88102	OPEN WOUND OF WRIST
29-Oct-92	19:50:03	23	DIARRHEA	78900	ABDOMINAL PAIN-SITE NOS
29-Oct-92	19:50:03	23	DIARRHEA	53500	ACUTE GASTRITIS S HEMOR
17-Dec-92	17:55:00	57	LACERATION	88102	OPEN WOUND OF WRIST
27-Apr-93	12:58:08	135	DEPRESSION	8840	MULT OPEN WND ARM/S COMP
23-Jun-93	17:16:21	57	LACERATION	88100	OPEN WOUND OF FOREARM
14-Oct-93	14:22:00	31	GI BLEEDING	78900	ABDOMINAL PAIN-SITE NOS
5-Nov-93	18:37:17	3	ABDOMINAL PAIN	78900	ABDOMINAL PAIN-SITE NOS
8-Jun-94	12:51:11	20	DEHYDRATION	5990	URINARY TRACT INF NOS
8-Jun-94	12:51:11	20	DEHYDRATION	9955	CHILD MALTREATMENT SYND



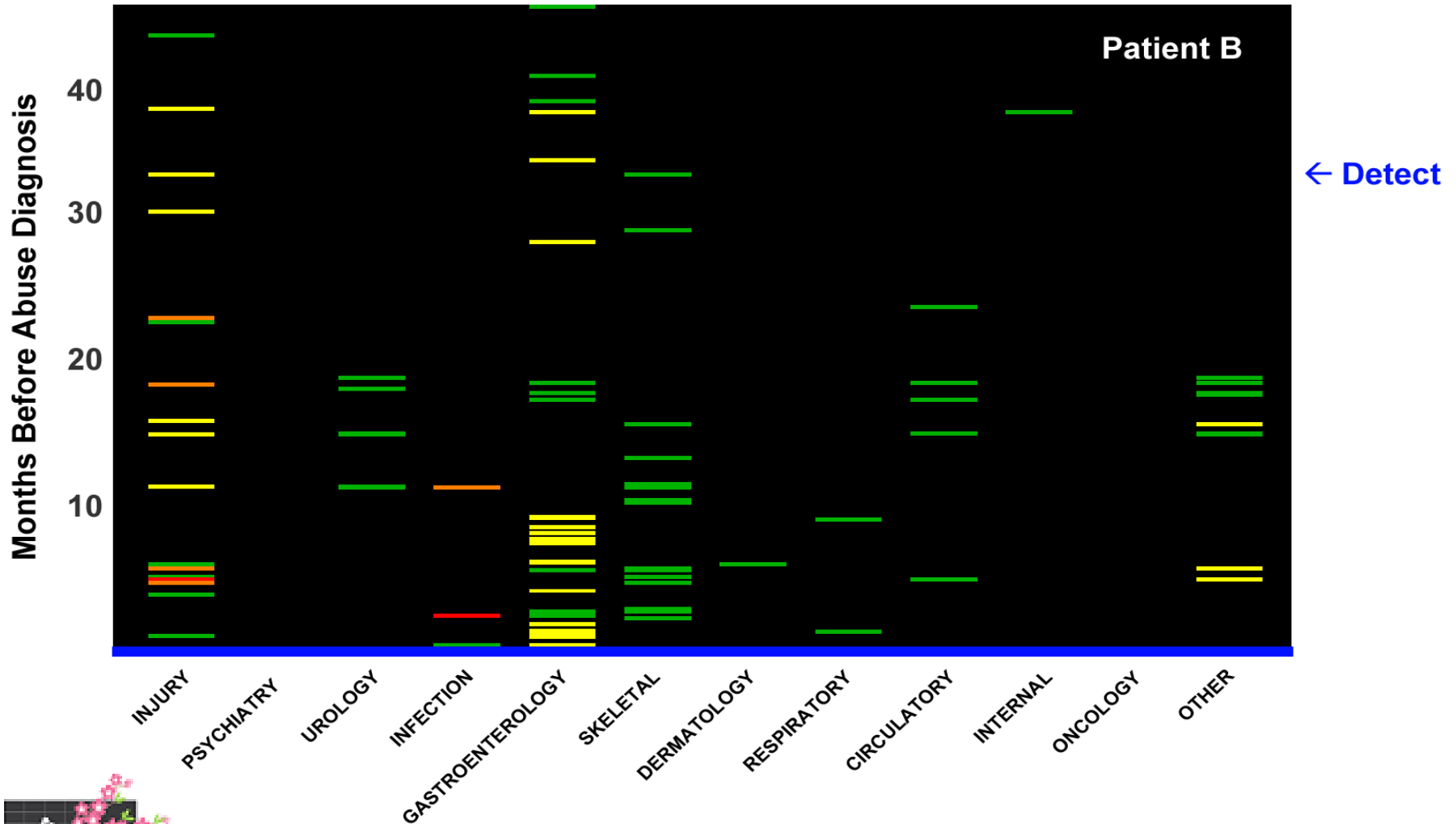
# Suffering abuse – earlier presentations for men



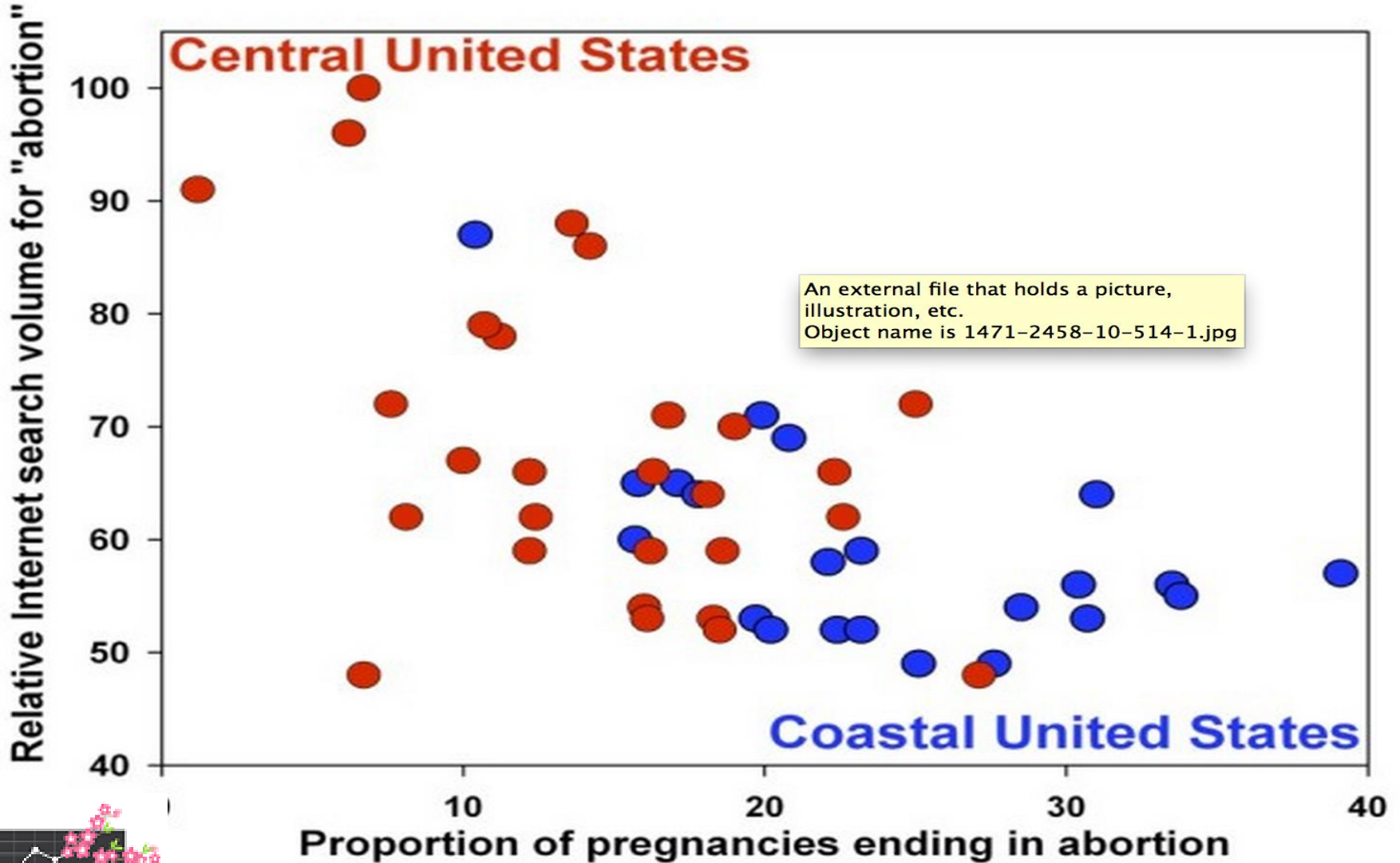
# Suffering abuse – earlier presentations for women



# Identifying patterns in data before diagnosis

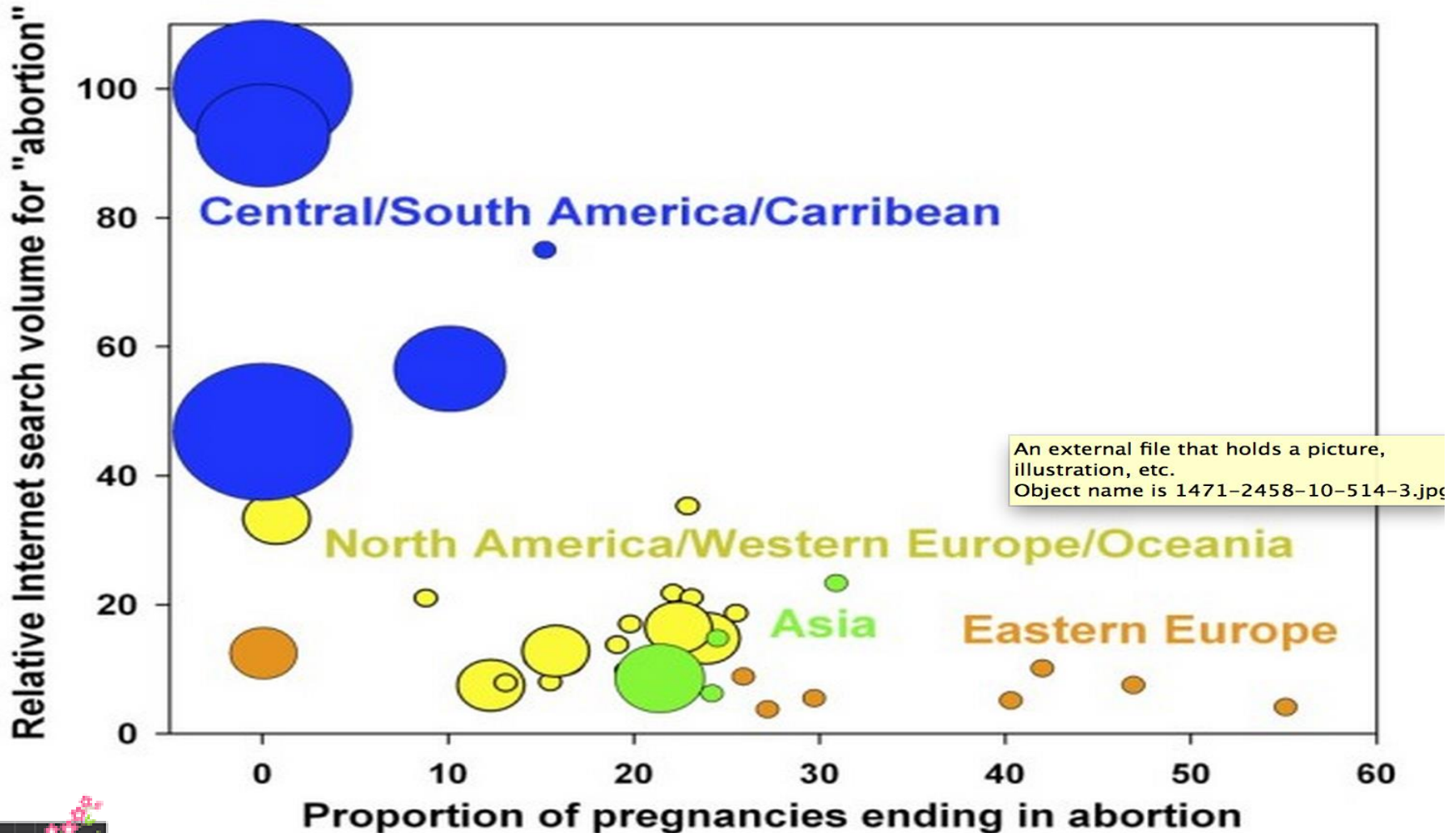


# Exploring correlations between linked datasets





# Further developing these correlations globally



An external file that holds a picture, illustration, etc.  
Object name is 1471-2458-10-514-3.jpg

# PREDICTIVE MEDICINE GROUP

Common data,  
Uncommon predictions

Predmed.org

Ben\_Reis@Harvard.edu

# PatientsLikeMe

## New communities for patient-led data sharing

The screenshot shows the PatientsLikeMe website interface. At the top, there's a navigation bar with 'patientslikeme' and a 'Join Now! (It's free)' button. Below that, there are tabs for 'Patients', 'Conditions', 'Treatments', 'Symptoms', and 'Research'. A search bar is present with the text 'conditions, symptoms, treatments...'. The main content area is titled 'Home > Find Patients' and features a 'Quick searches' section with 'Newest patients' and '3 Star patients'. A filter sidebar on the left allows users to filter patients by age, gender, stars, treatment, symptom, and interests. The main list shows 17,665 public patients, with the first few entries including Tom M (ALS, 5 yrs), MachaDesu (Asperger's), w76b (seizures), thebobo1 (Major Depressive Disorder), and one\_step\_closer (Borderline Personality Disorder). The Windows taskbar at the bottom shows the date as 15/05/2013 and the time as 01:34.





ALS: 9 yrs

**alsking101**  
 Male, 37 years  
 Newton, MA

**Primary Condition:** ALS  
**First symptom:** Nov 1997  
**Diagnosis:** Dec 1998  
**Deceased:** Nov 26, 2006

See more

Say Hello Send Private Message

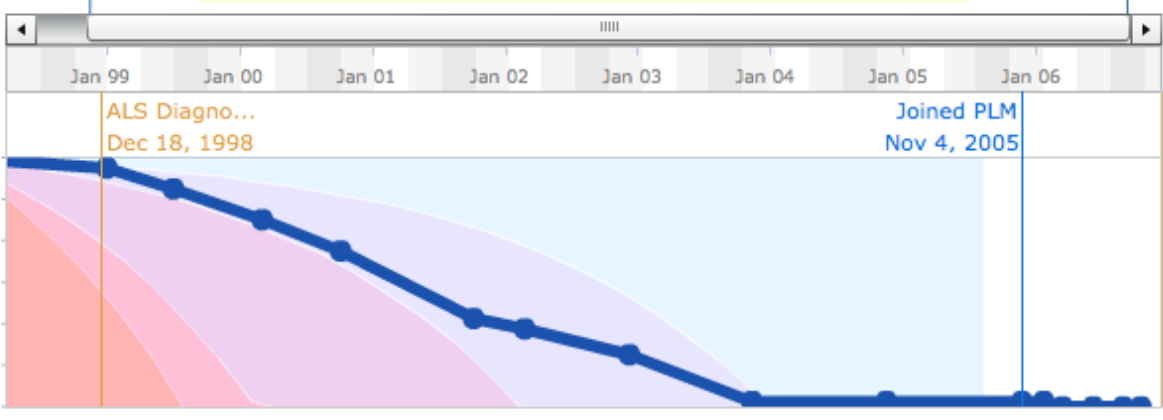
Display charts from

PLM 1 mo 6 mo

1 yr 2 yr All

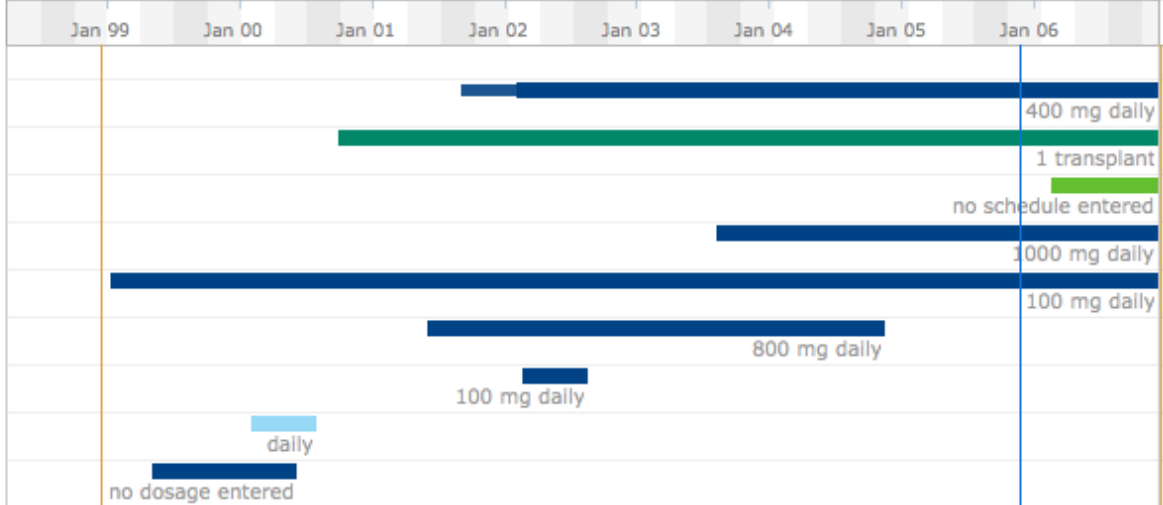
Sort This Profile

Apr 2, 1999 Nov 26, 2006



Treatments

- Type of treatment
- Prescription Drug
- Over the Counter Drug
- Procedures
- Supplement
- Equipment
- Side Effect
- Evaluation



ALS (Amyotrophic Lateral Sclerosis)

- Allopurinol
- Autologous CD34+ Stem Cell Tr
- Cyberkinetics Implant
- Hydroxyurea
- Rilutek
- Celebrex
- Dapsone (DDS)
- BuNaoGao (BNG)
- BDNF

Roll over bars for more information



# New streams of mobile data

## Tracking individuals & influencing behaviour



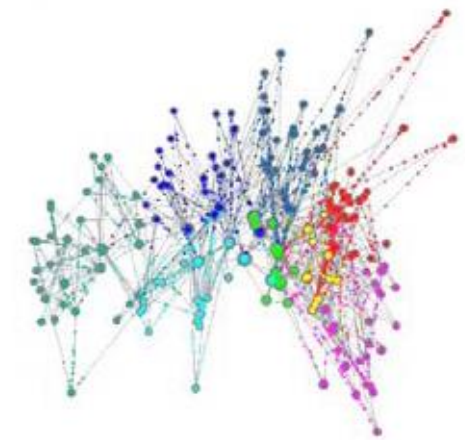
2009 DARPA Red Balloon Challenge  
Winners - MIT Media Lab(Alex Pentland) - 9 hours



2013 Sense Networks - mClick-to-Visit™ Analytics



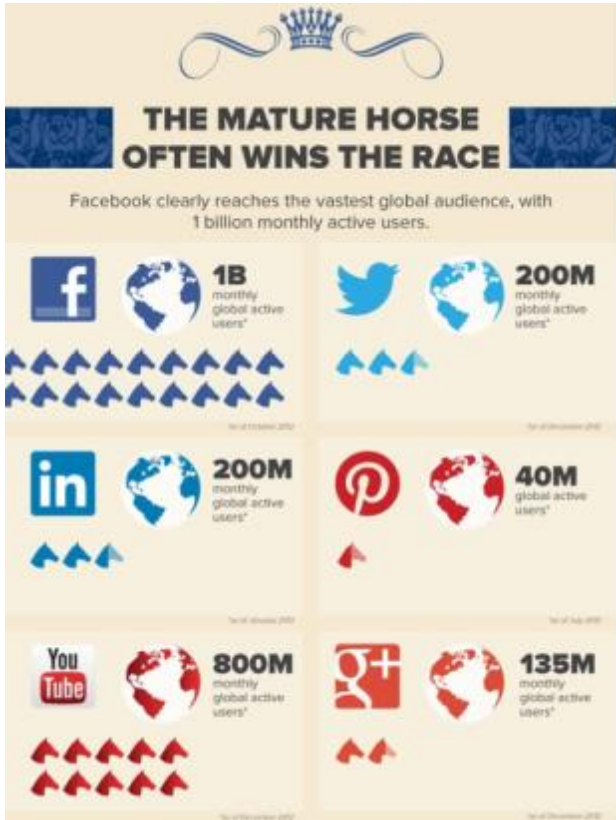
2008 Sense Networks – San Francisco Tribes



# Unlocking different social media channels

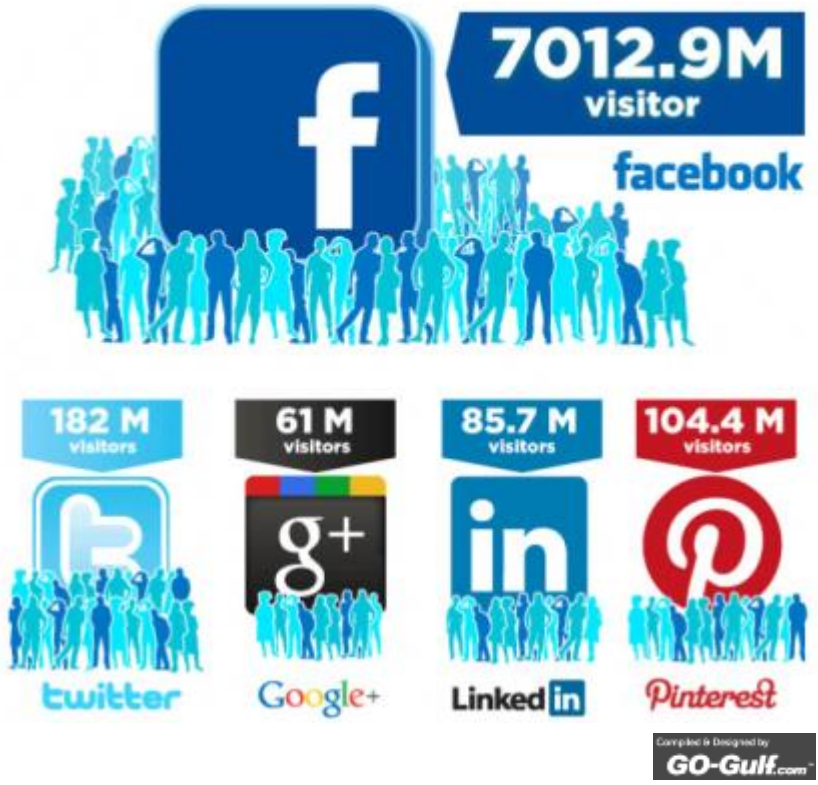


# Top 5 Social Media platforms



<http://www.brafton.com/infographics/social-media-horse-race>

## Monthly Visits on Top Social Networking Websites

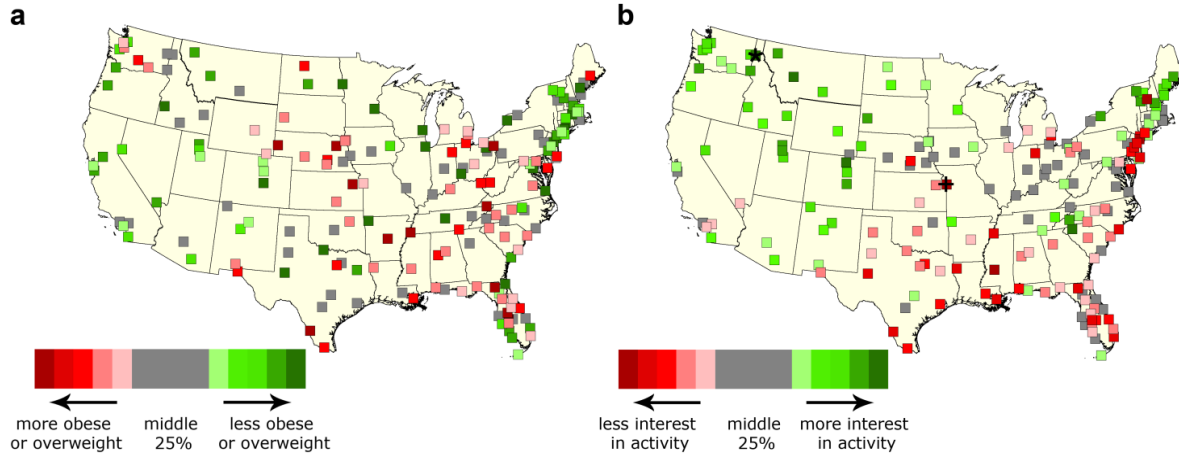


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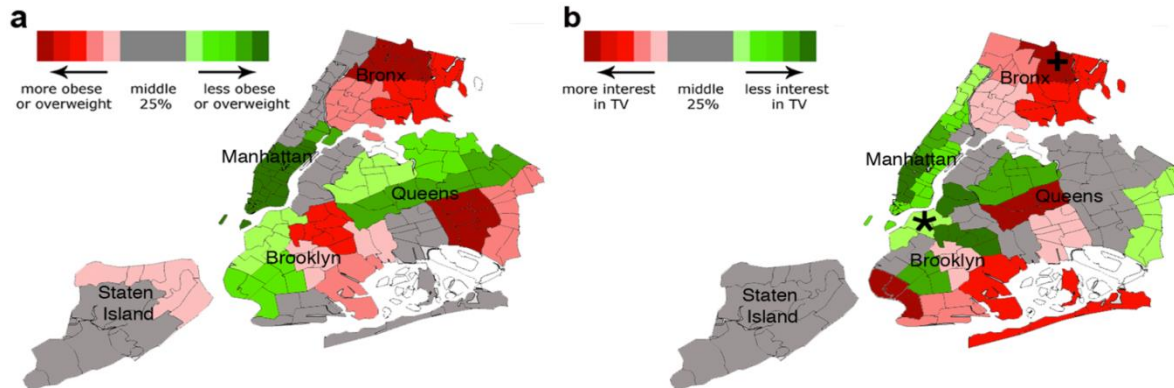
There is a difference between user numbers and user activity.  
Insurers need to understand what they need  
**EXPOSURE or ENGAGEMENT**



# Using Social Media in predictive underwriting



**Activity-related interests vs obesity in USA**



**TV interests vs obesity in New York City**

Chunara R, Bouton L, Ayers JW, Brownstein JS (2013) Assessing the Online Social Environment for Surveillance of Obesity Prevalence. PLoS ONE 8(4): e61373. doi:10.1371/journal.pone.0061373  
<http://www.plosone.org/article/info:doi/10.1371/journal.pone.0061373>



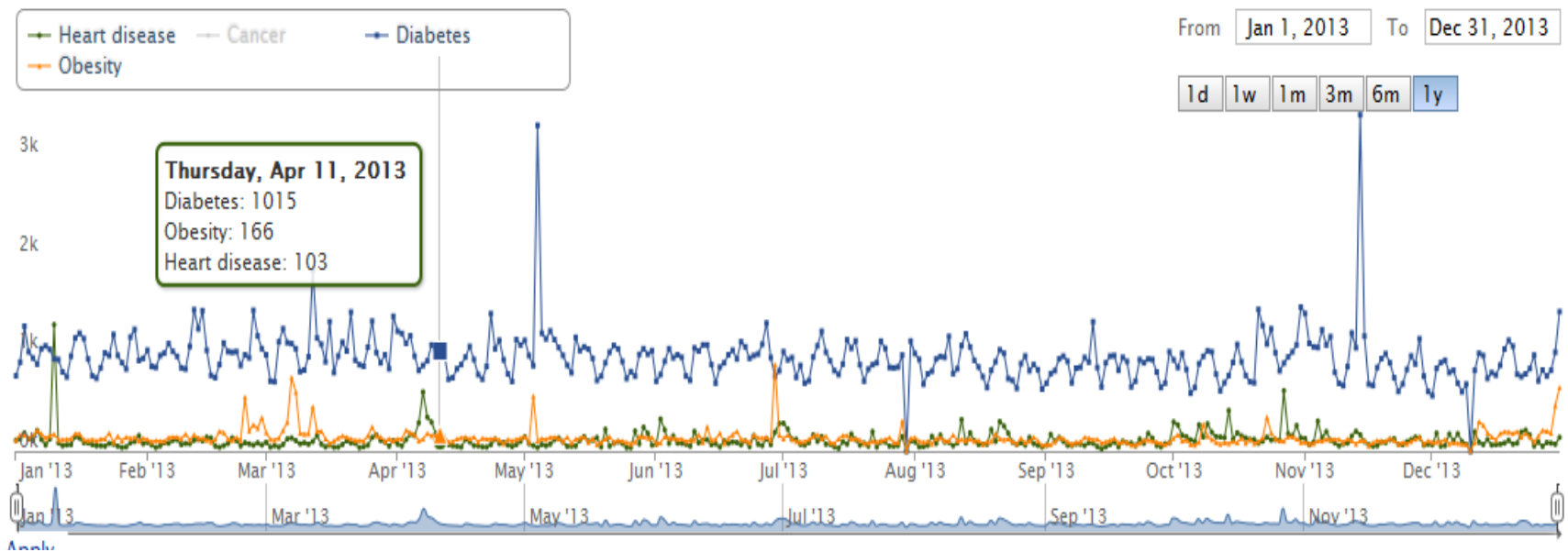
# Using Social Media to find disease prevalence

- Twitter messages collected over a period for four defined chronic diseases and allocated to different locations:
  - heart disease
  - cancer
  - diabetes
  - obesity



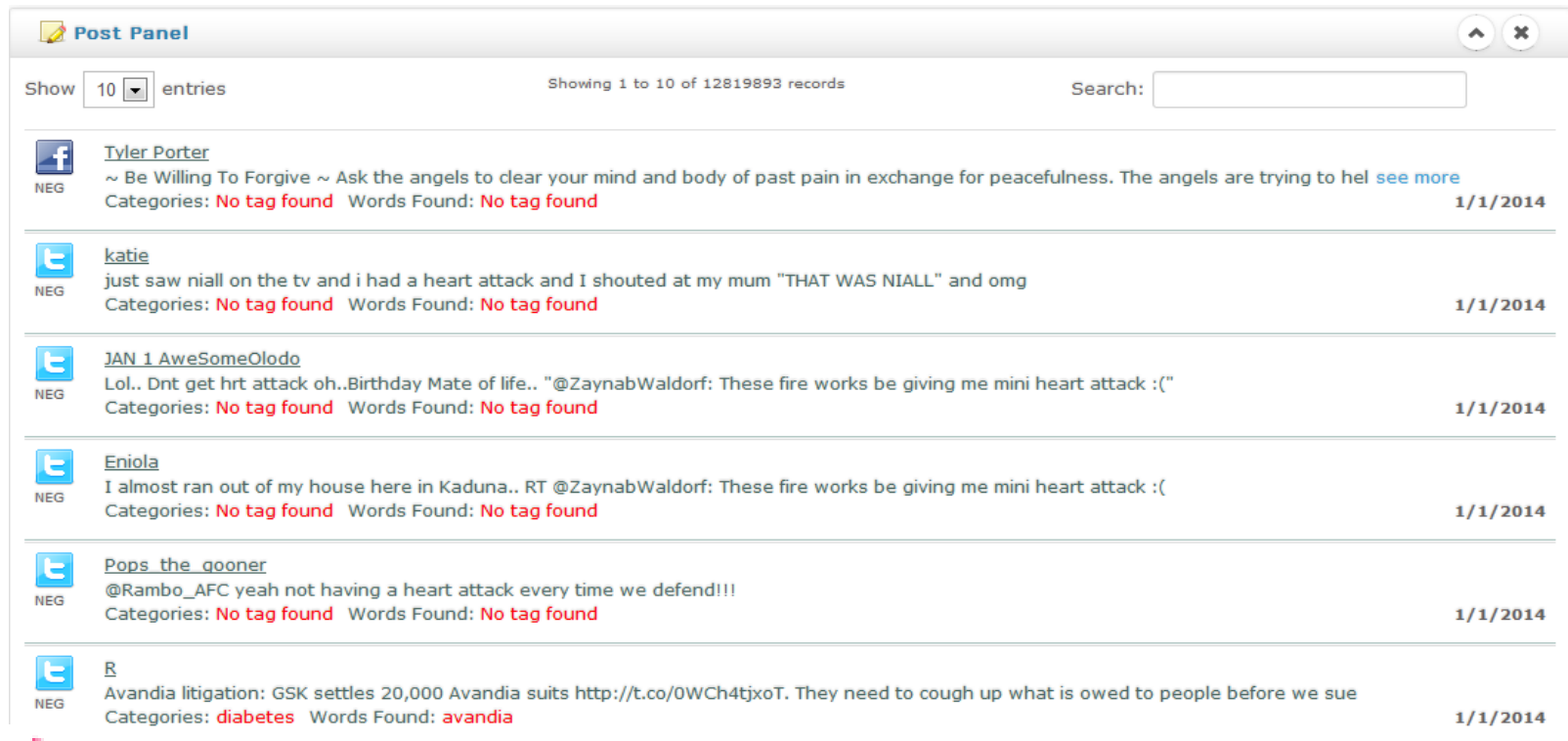
# Using Social Media to find disease trends

- Trend analysis over a selected time window
  - number of collected Tweets for each disease
  - able to zoom to a particular period of time



# Using Social Media to find content & sentiment

- Content explorer
  - Read content and meta-data according to the current filters



The screenshot shows a 'Post Panel' window with a search bar and a list of posts. The posts are filtered by sentiment (NEG) and date (1/1/2014). The posts are as follows:

Platform	User	Text	Sentiment	Categories	Words Found	Date
Facebook	Tyler Porter	~ Be Willing To Forgive ~ Ask the angels to clear your mind and body of past pain in exchange for peacefulness. The angels are trying to hel <a href="#">see more</a>	NEG	No tag found	No tag found	1/1/2014
Twitter	katie	just saw niall on the tv and i had a heart attack and I shouted at my mum "THAT WAS NIALL" and omg	NEG	No tag found	No tag found	1/1/2014
Twitter	JAN 1 AweSomeOlodo	Lol.. Dnt get hrt attack oh..Birthday Mate of life.. "@ZaynabWaldorf: These fire works be giving me mini heart attack :("	NEG	No tag found	No tag found	1/1/2014
Twitter	Eniola	I almost ran out of my house here in Kaduna.. RT @ZaynabWaldorf: These fire works be giving me mini heart attack :(	NEG	No tag found	No tag found	1/1/2014
Twitter	Pops_the_ooner	@Rambo_AFC yeah not having a heart attack every time we defend!!!	NEG	No tag found	No tag found	1/1/2014
Twitter	R	Avandia litigation: GSK settles 20,000 Avandia suits <a href="http://t.co/0WCh4tjxoT">http://t.co/0WCh4tjxoT</a> . They need to cough up what is owed to people before we sue	NEG	diabetes	avandia	1/1/2014

# Using Social Media to sell insurance

facebook

Email or Phone Password Log in

Keep me logged in Forgiven your password?

Malayan Insurance (Philip.. Malayan Insurance Like

MALAYAN INSURANCE  
A YGC Member  
**MALAYAN ONLINE.**  
Peace of Mind at Your Fingertips

Shopping Bag  
Drag & Drop Products to Me  
Open Bag

iTravel Total One Protection i4U Fire Insurance

Category: Store

Malayan Insurance is the leading non-life insurance company in the Philippines.

For over 80 years we have given great service, comprehensive protection, and speedy processing, but what we've done to really stay on top time and time again is cater to the needs of the Filipino. We continue that same tradition today with Malayan Online, the first in the country to have non-life insurance available on Facebook.

You know you've put-off getting insurance long enough. Now we've made it fast, easy, convenient, and even more dependable than before. For today's lifestyle, Malayan Online is insurance that clicks.

Get insured today with Malayan Online. Peace of mind at your fingertips.

iTravel Total One Protection i4U

"Malayan Online" allows you to complete the entire policy acquisition journey on Facebook. You can choose to automatically use your personal info (e.g. name, surname, email, date of birth, etc.) from Facebook or fill it in manually.

This is one of the first (if not the first) insurance company to sell insurance policies on Facebook. They offer travel insurance, personal accident, life insurance, critical illness insurance and some other health products



# Using Social Media to design insurance

Stel uw vraag

verzekeraZelf.nl

Premie Berekenen | Blog Zelfverzekerd | Over ons wie-wat-waar | Mijn Dossier Login

Auto | Motor-brommer | Recht | Reis-Recreatie | Wonen | Leven | Ongeval | Dier en Zorg | Pakketten

Autoverzekering | 2e Gezinsauto | Exclusieve Autoverzekering | Oldtimer auto

- Auto**
  - Autoverzekering
  - 2e Gezinsauto
  - Exclusieve Car
  - Oldtimer auto
- Motor-Brommer**
  - Motor
  - Custom Motor
  - Oldtimer motor
  - Brommer-scooter
  - Fiets
- Wonen**
  - Opstal
  - Inboedel
  - Kostbaarheden
  - Glas
  - Riet Opstal
  - Riet Inboedel
- Pakketten**
  - Klikklaar alles in 1 pakket
  - Studenten-pakket
  - Woonpakket
- Leven**
  - Overlijdensrisico
  - Zorg
- Recht**
  - Rechtsbijstand verkeer
  - Rechtsbijstand particulier
  - Aansprakelijkheid
- Dier en zorg**
  - Paardenpakket
  - HondenZorg
  - KattenZorg
- Reis-Recreatie**
  - Reis/annulering
  - Globetrotter
  - Caravan
  - Stacaravan
  - Pleziervaartuijg
- Ongeval**
  - Inzittende
  - Opzittende
  - Persoonlijk
  - Gezin
- Vergelijkservice**

Vraag aan >

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Intrasurance offers people to completely build their own policy. They believe customers are smart enough to do that themselves. Their aim is to remove any requirement for back-office intervention. Everything online.

People are becoming more confident to set up their own policies. They want to have the choice/flexibility and people are coming to expect to make changes themselves (e.g. address, contact info, etc.)

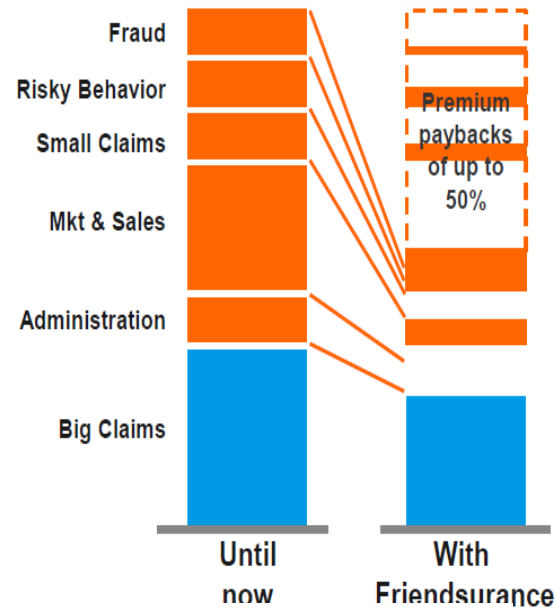
# Using Social Media to innovate insurance

## Friendsurance & Facebook

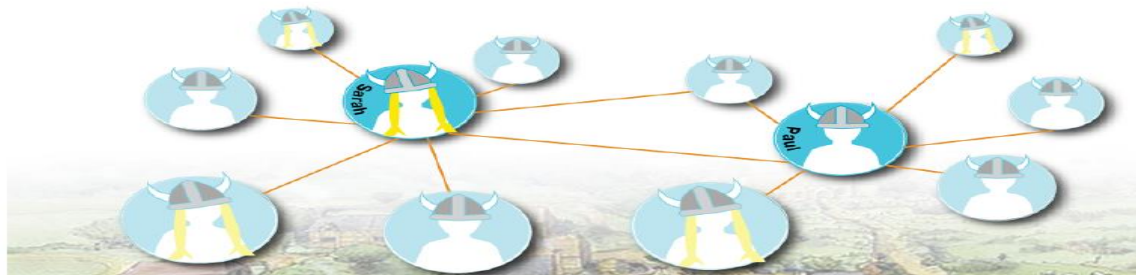
Small Claims



Big Claims



- ✓ Reduced fraud
- ✓ Better risk selection
- ✓ Reduced process cost
- ✓ Lower cost of sales





# What do I know?



MARKS & SPENCER

Married for 17 years



CACI

SN8 2DD



Oxford NANOPORE Technologies



Age: 42

USA.gov Government Made Easy



YouTube



Google

toptable

Expedia

CPRD MORE DIMENSIONS TO DATA

Father of 2

hscic Health & Social Care Information Centre



Swiss Re



TOWERS WATSON



TOMTOM



# Rapid progress in genetic sequencing & testing

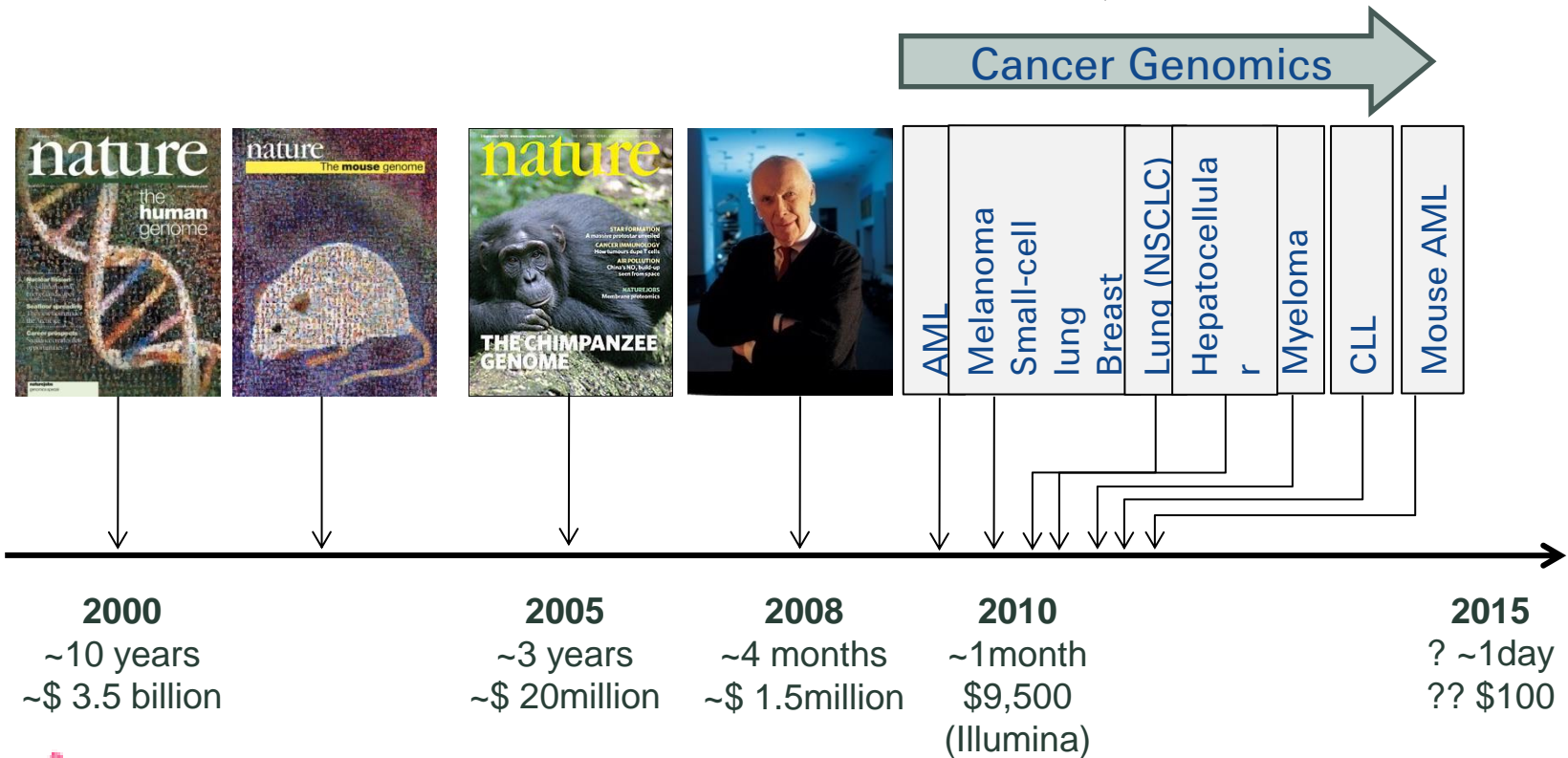
# Genomic sequencing

## Increasing speed of developments

Sanger (capillary) sequencing

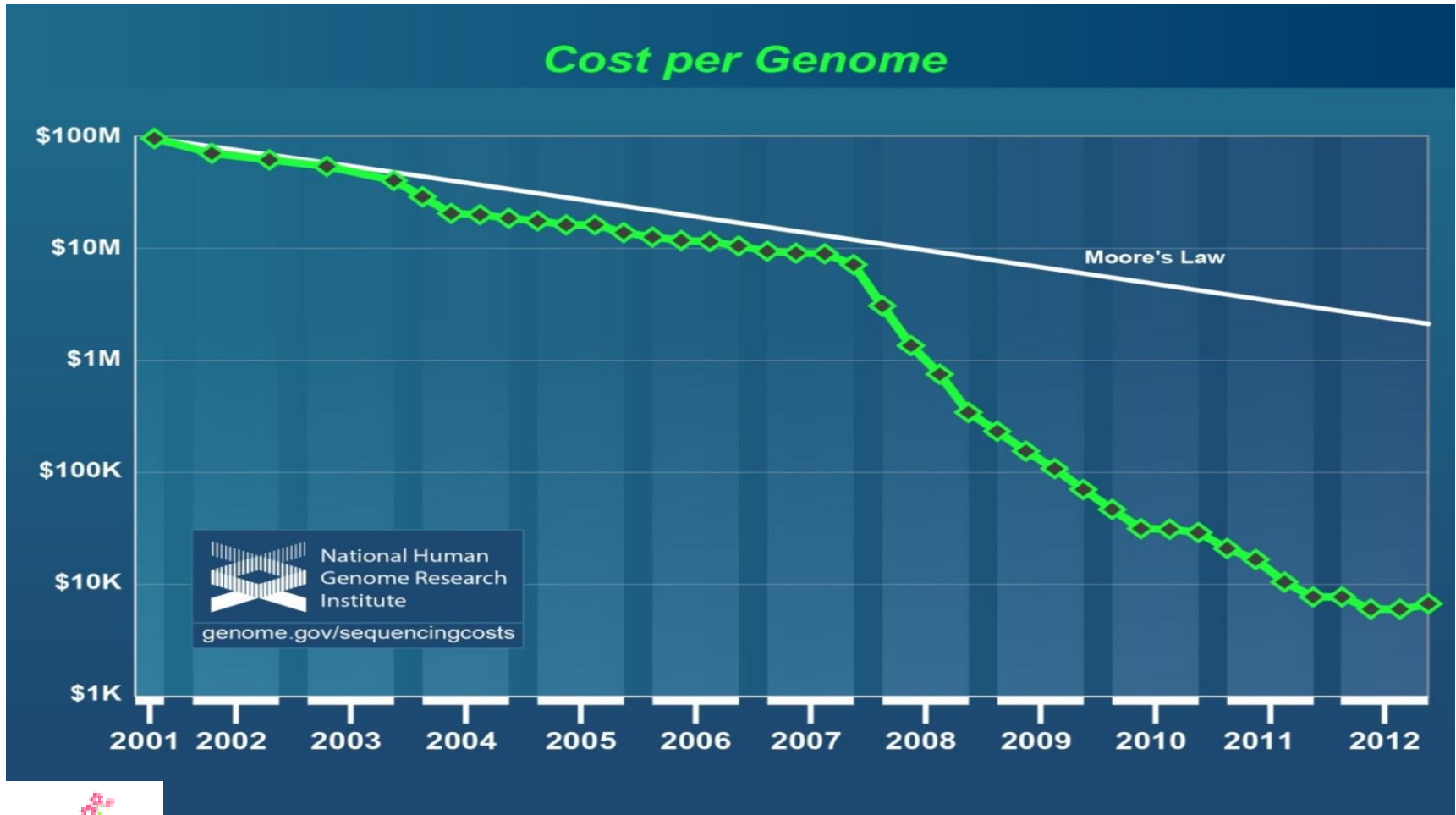
Next generation sequencing

Cancer Genomics



# Genomic sequencing

## Rapid reduction in sequencing costs

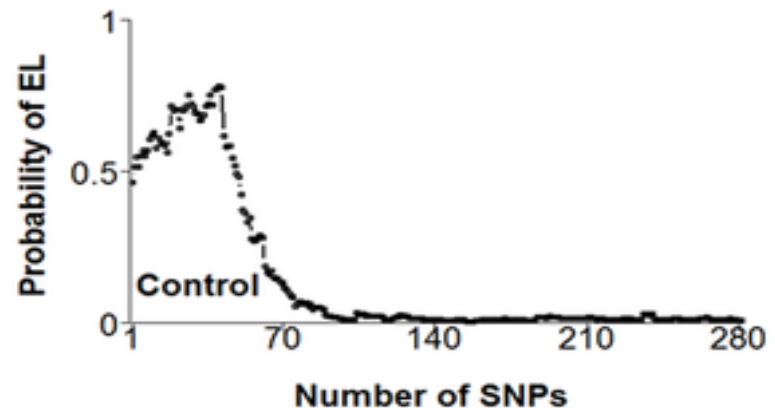
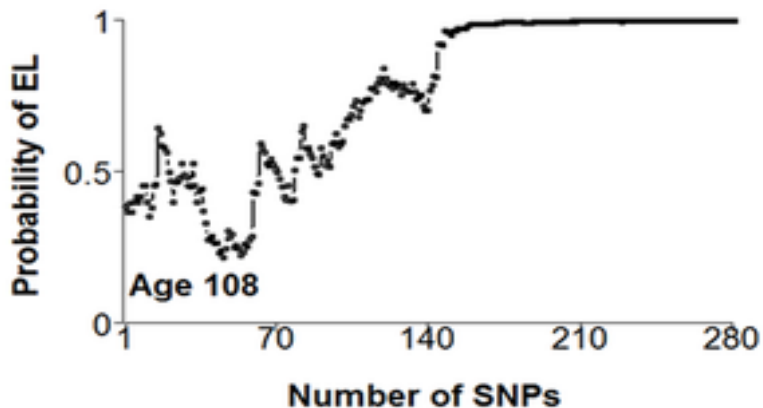
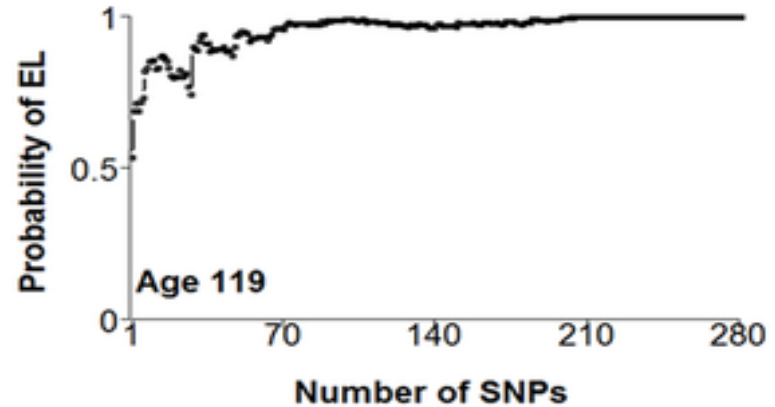
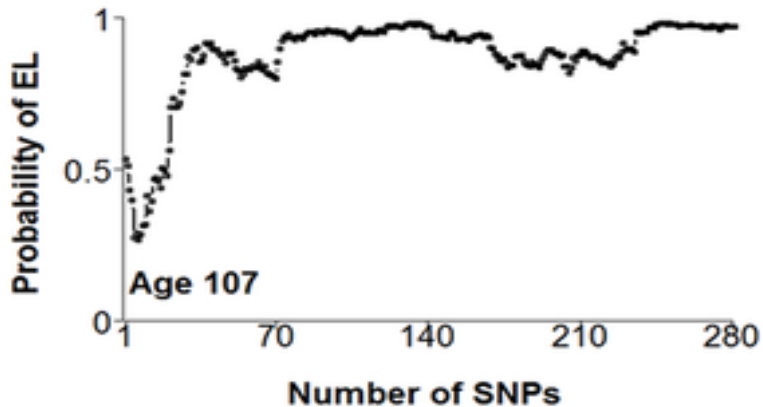


Source: <http://www.genome.gov/sequencingcosts/>



# Genetic profiles for extreme longevity

## New England Centenarian Study



Source: Sebastiani P, Solovieff N, DeWan AT, Walsh KM, et al. (2012) Genetic Signatures of Exceptional Longevity in Humans. PLoS ONE 7(1): e29848. doi:10.1371/journal.pone.0029848  
<http://www.plosone.org/article/info:doi/10.1371/journal.pone.0029848>



# Efforts to link genotype and phenotype



- Identification of new genetic variants for inherited cancer risk
- Comparison of DNA over 200,000 people to find genetic alterations associated with breast, ovarian and prostate cancer
  - **49 new SNPs for breast cancer** (2x more than known), **11 new SNPs for ovarian cancer**, **26 new SNPs for prostate cancer** (total of 78)
- Provides basis for development of new genetic tests for stratification into high- and low risk population groups
- Leading to future advances in screening programmes, preventive strategies, individualized treatment and/or lifestyle changes for people at higher risk



# Number of genetic tests in clinical practice

May 2013


## GeneTests

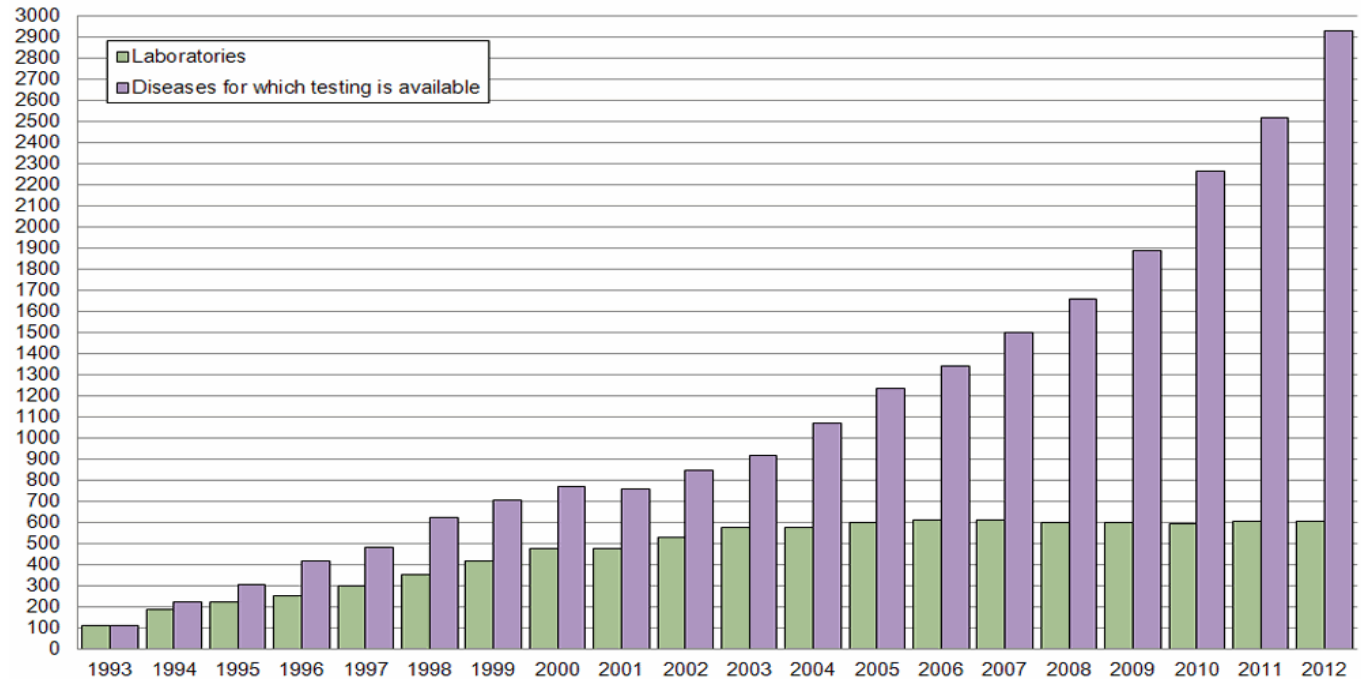
2,979 disease-genes  
1,056 tests in clinics  
612 laboratories  
581 GeneReviews

## UKGTN

568 genetic diseases  
tested in UK Genetic  
Testing Network  
assessed by ACCE  
framework:

- Analytical validity
- Clinical validity
- Clinical utility
- Ethical, legal, social

 **GeneTests: Growth of Laboratory Directory**



Data source: GeneTests database (2012)/www.genetests.org

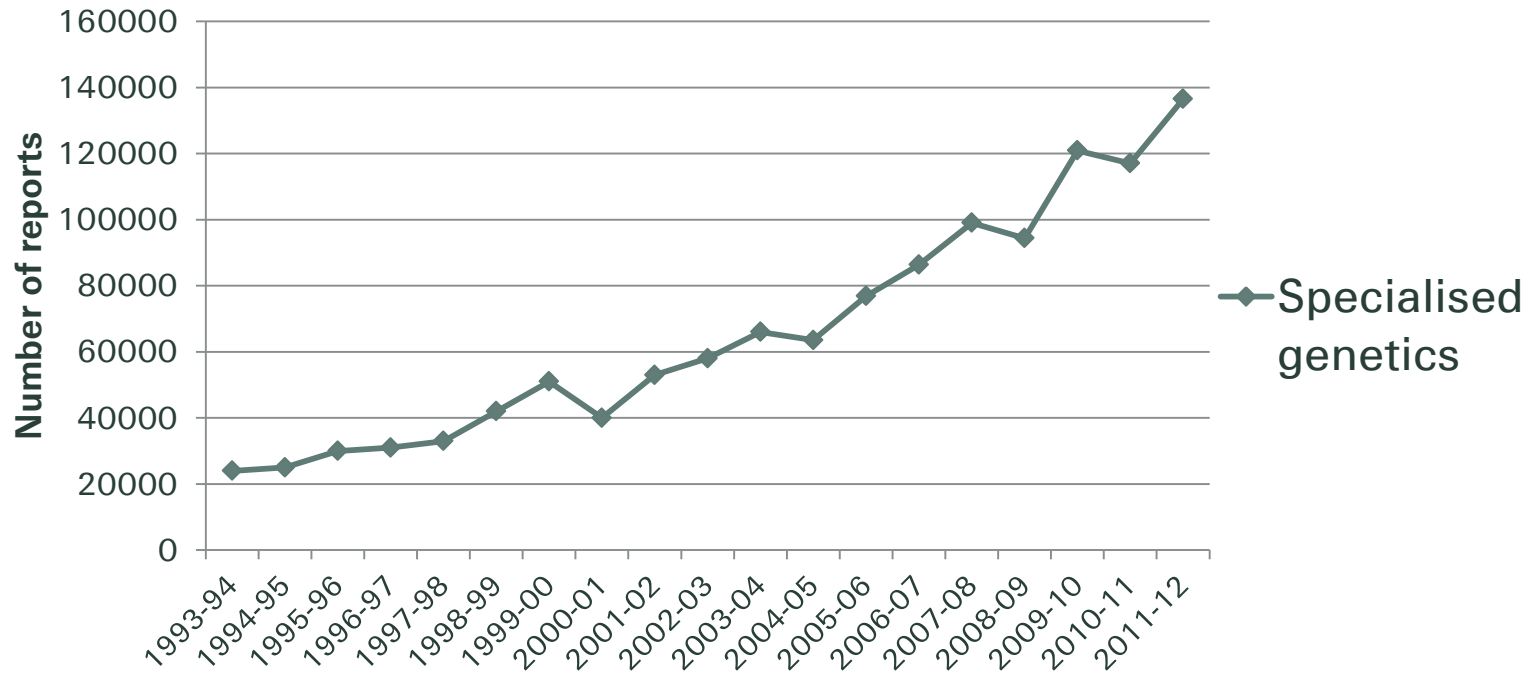




# Genetic tests carried out in UK NHS

## 10% annual growth rate

### Trend in clinical genetic testing



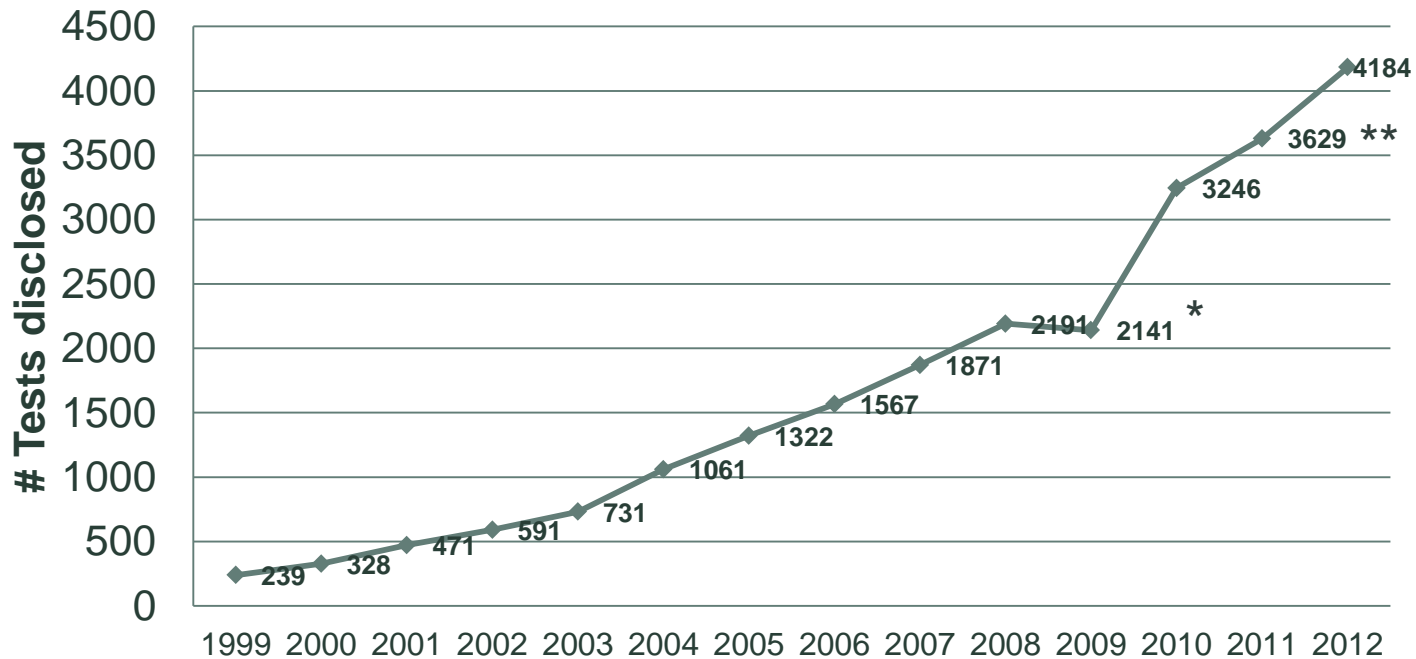
Source: CMGS audit reports



# Genetic tests disclosed to UK insurers

## 23% annual growth rate

Tests disclosed for all conditions by year



\* reduction of life insurance business written during financial crisis

\*\* equals ~2.2‰ of sold new life protection products in 2011 (1.65 mio)

source: ABI Compliance Reports



# Disclosures to insurers on genetic tests

Disease	Gene(s)	CMGS 2010	ABI 2010	% disclosed
Breast/Ovarian Cancer (BRCA1/2)	BRCA1, BRCA2	2224	291	13
Huntington's Disease	HD	404	148	37
Familial Adenomatous Polyposis (FAP)	APC	256	55	21
Myotonic Dystrophy (MD)	DMPK	147	61	41
Multiple Endocrine Neoplasia (MEN)	RET	105	11	10
Familial Hypertrophic Cardiomyopathy Dilated Cardiomyopathy	MYBPC3, MYH7, TNNT2, TNNI3, TPM1, MYL3, ACTC1, PRKAG2, GLA, MYL2, LMNA	557	37	7
Long QT syndrome	KCNQ1, KCNH2, SCN5A	351	14	4
Familial Hypercholesterolemia	LDLR, APOB, PCSK9	330	7	2
	Total	4374	624 *	14

\* 75% of disclosed predictive genetic tests are negative



# Transforming our knowledge with sensors



# Collecting personal data in the past

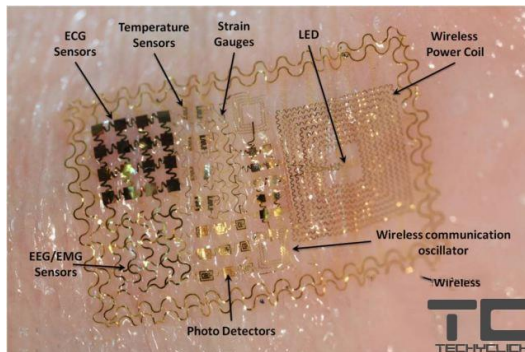
## Pioneers pushing the boundaries



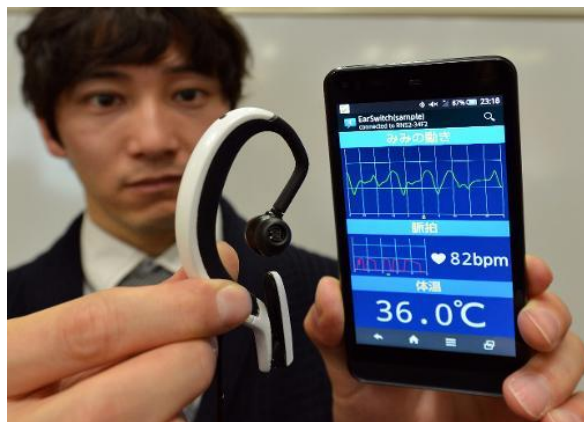
Have you heard of Larry Smarr... the most monitored man in the world?

# Collecting personal data going forward

## Potential of wearable health monitoring systems



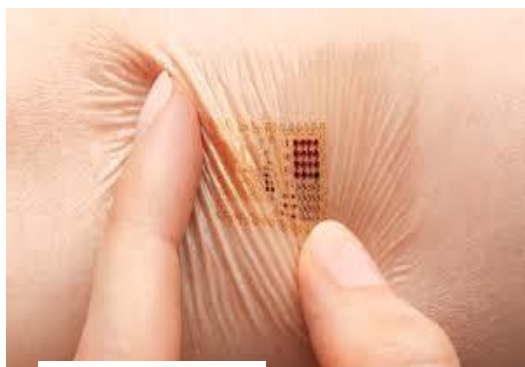
Smart skin/tattoos



Wearable sensors



Smart garments

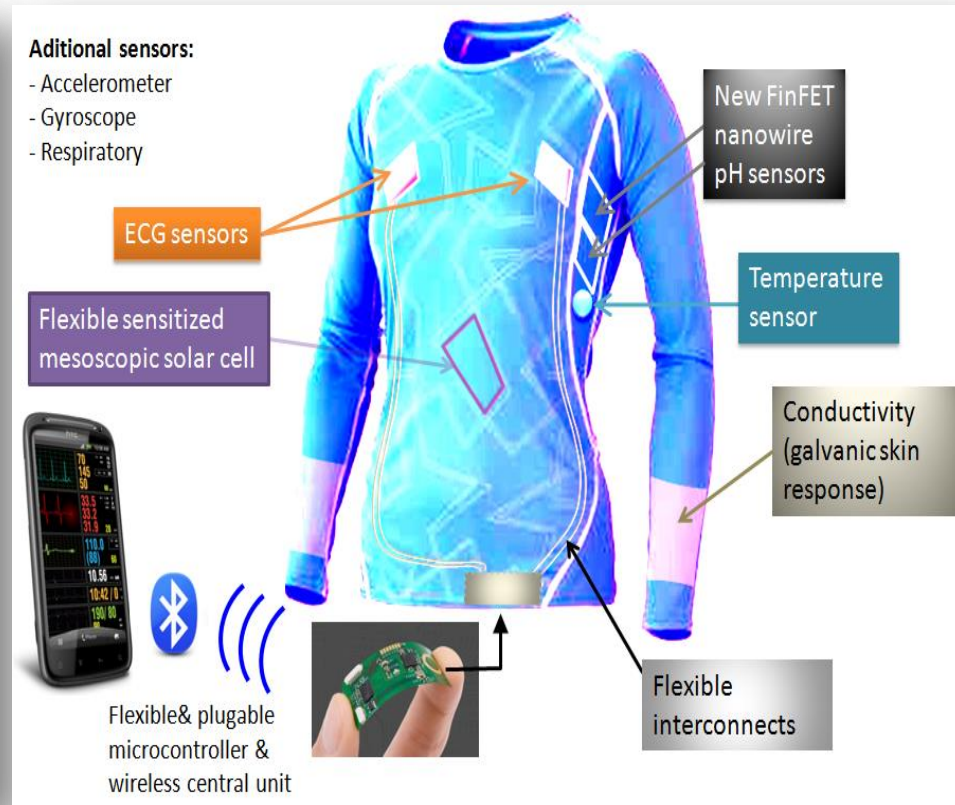
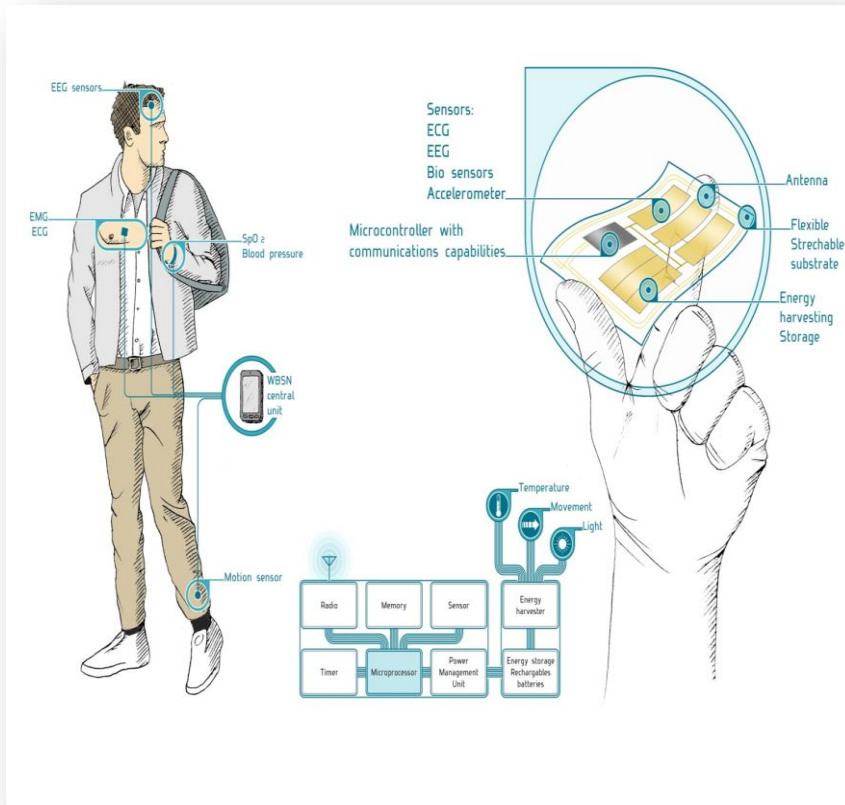


Smart lenses



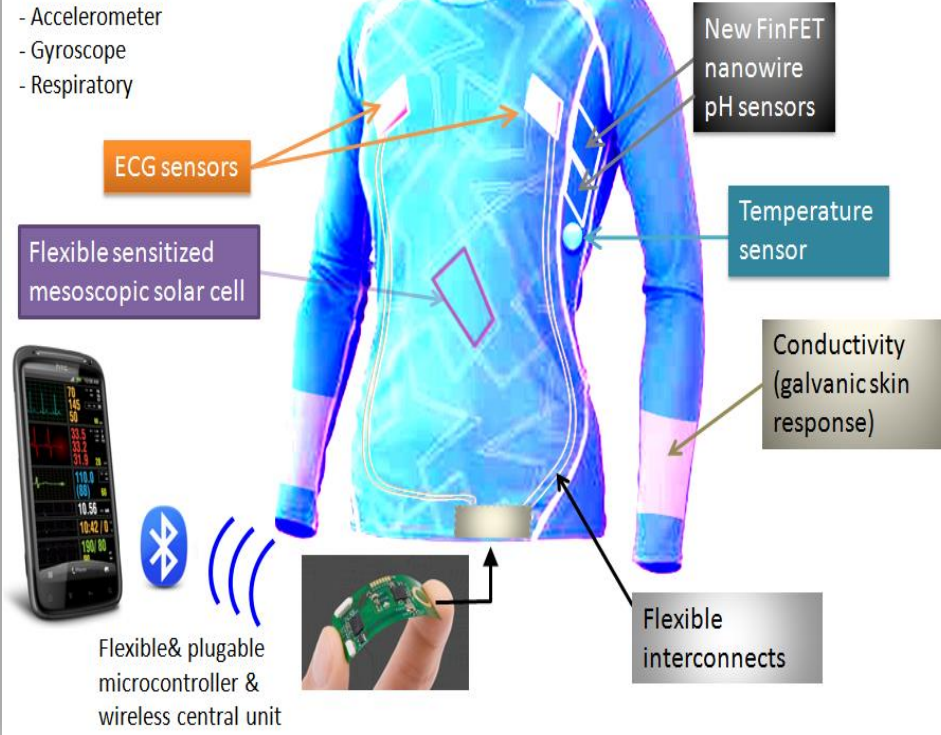
# Collecting personal data going forward

## Wearable Guardian Angels



### Additional sensors:

- Accelerometer
- Gyroscope
- Respiratory



Smart Body Area Networks of sensors

Xsensio – real-time evaluation of hydration & physical activity





# Collecting new streams of data

## Google Glasses – disruptive technology by 2020

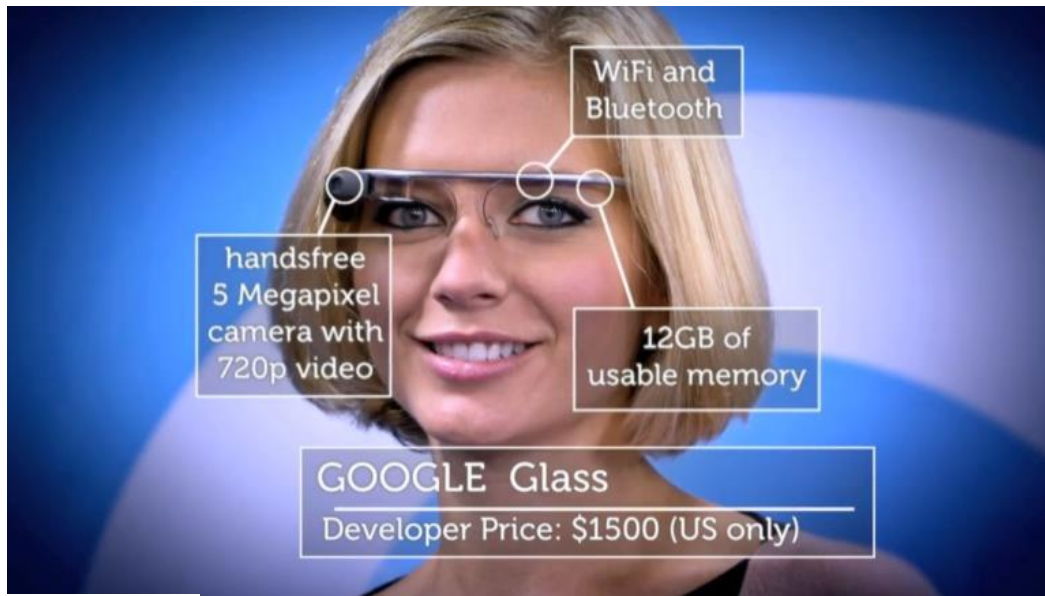
**10% would wear the glasses regularly**

**44% would not buy at current price of \$1,500**

**45% would wear glasses for taking photos, video or as phone**

Study of 1,000 US adults surveyed by BiTE Interactive

**39% would not buy at lower price of \$1,000**



Early medical applications

- Immediate diagnosis
- Medical assistance during emergencies
- Virtual assistance during surgeries
- Video recordings during surgery
- Telemedicine
- Real-time nutrition
- Sales simulations & marketing

# Swiss Re 150<sup>th</sup> anniversary celebrations

## Connecting clients, stakeholders & generations

ZURICH



LONDON



NEW YORK

BEIJING



# Swiss Re 150<sup>th</sup> anniversary celebrations

## OpenMinds Blog – sharing ideas, opinion & information

openminds.swissre.com



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Funding longer lives

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Sustainable energy

Currently showing: [Funding longer lives](#) > [Health/medicine](#)

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PREV NEXT

### A health care system that serves the patient



Daniel Martin Eckhart  
1 month ago

So just how private should your health data be? Most of us wouldn't want our brushes with illness shared... but isn't that where the future lies - finding solutions by sharing, by pooling, allowing science to learn from the wealth of it all?

Funding longer lives

Food security

Climate/natural disasters

Sustainable energy



# Thank you

