

Erasmus MC

Universitair Medisch Centrum Rotterdam



Erasmus MC

Creating value in Healthcare

Erik Zwarter, project manager

Introductie

Project manager

- Process optimalisation (LEAN)
- Software-implementation
- Innovation (AIDC)
- Patient safety
- Traceability

co-chair GDSN Netherlands

member of GS1 Healthcare Taskforce NL



Erasmus MC

10.262 (8417 fte)

Erasmus MC

653 (594 fte)

Capacity of patient care

1221 beds

Capacity of patient care

38.555
admissions

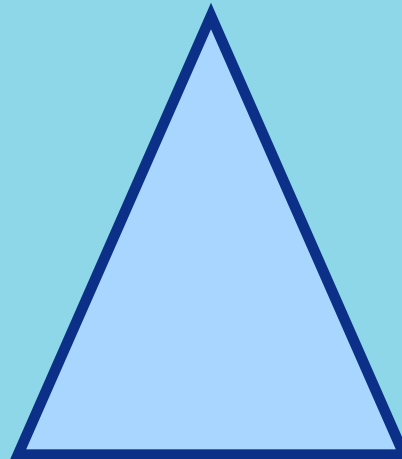
Capacity of patient care

7,9

Average patient days

Strategic triangle

Development new hospital

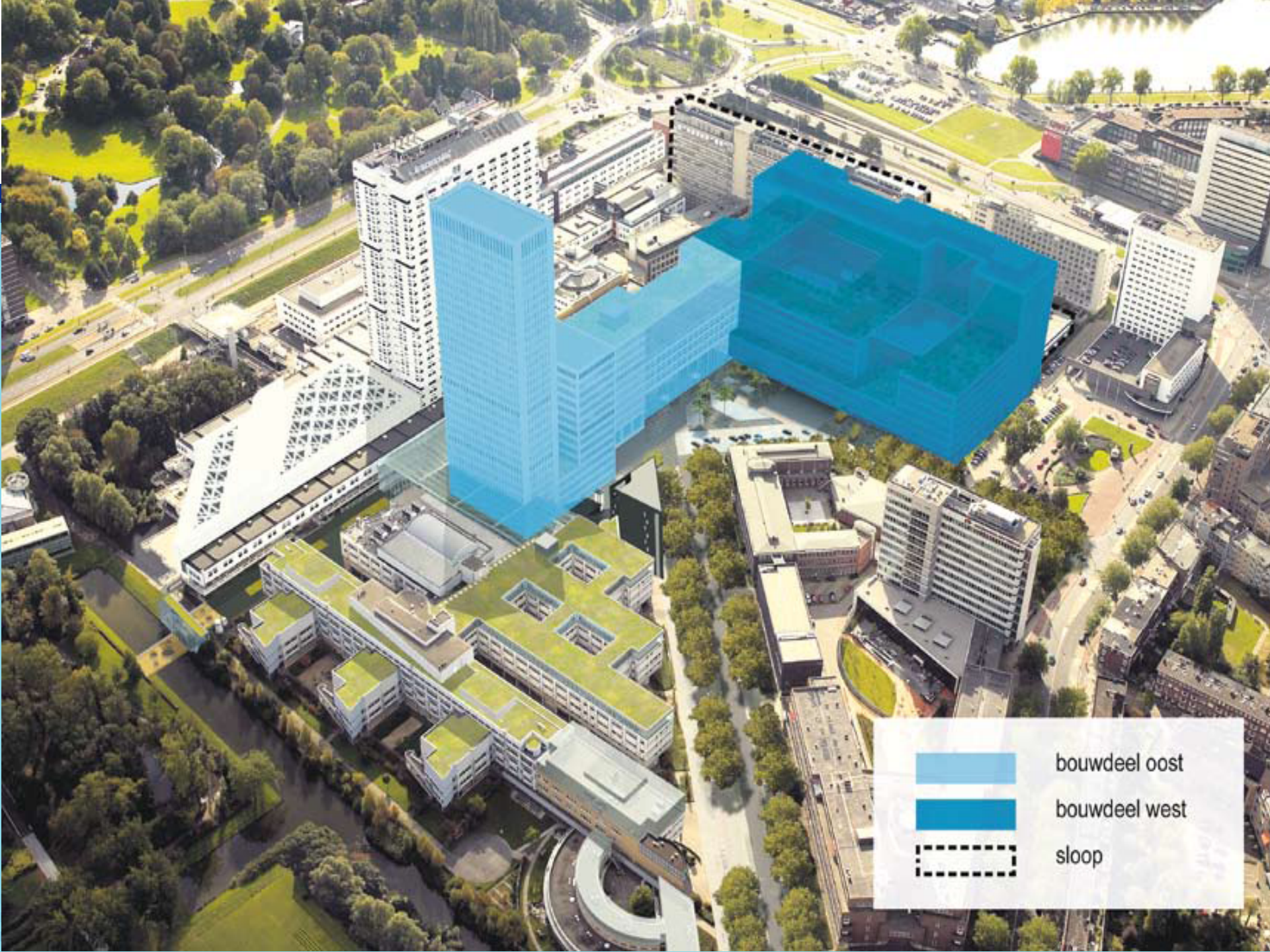


Organizational change

ICT innovation (EPR)

Erasmus MC is building





bouwdeel oost



bouwdeel west



sloop



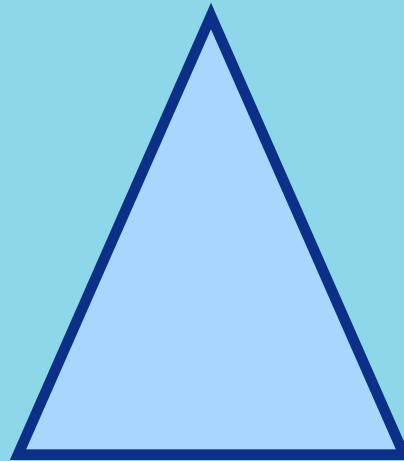


Great Hope Technology
6th Floor, Phase 1 (2014)



Strategic triangle

Development new hospital

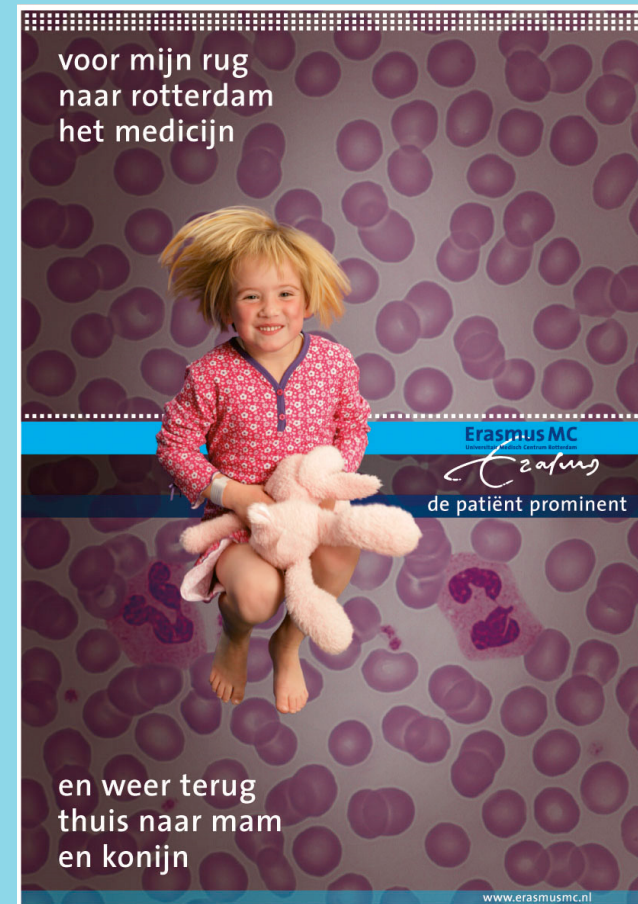


Organizational change

ICT innovation (EPR)

Thematic approach

- Brain and senses
- Oncology
- Surgery and Internal Medicine
- Cardiovascular
- Women and Children
- Emergency and intensive care
- Diagnostics



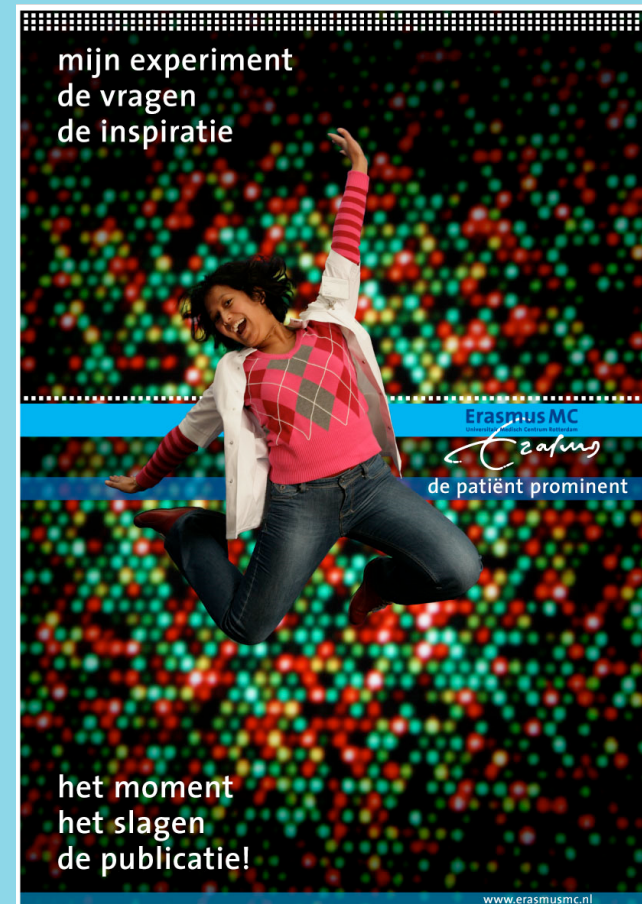
Patiënt Prominent

Erasmus MC is an internationally recognized center for excellent, dedicated patient care, highly rated transfer of knowledge and high-quality knowledge development in the fields of illness and health



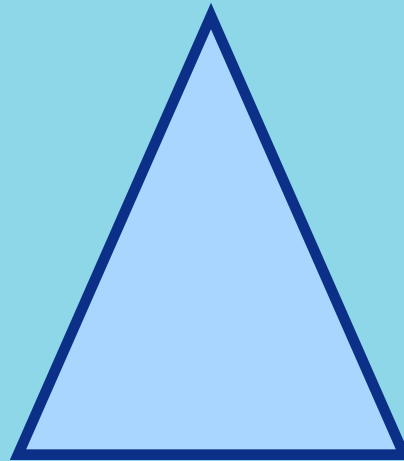
Coalition Agreement

- Cross connections between core tasks of patient care, education, and research
- In patient care
 - Care pathways
 - (poly) clinical capacity
- Thematic approach
 - board and management
 - support
- Change management



Strategic triangle

Development new hospital



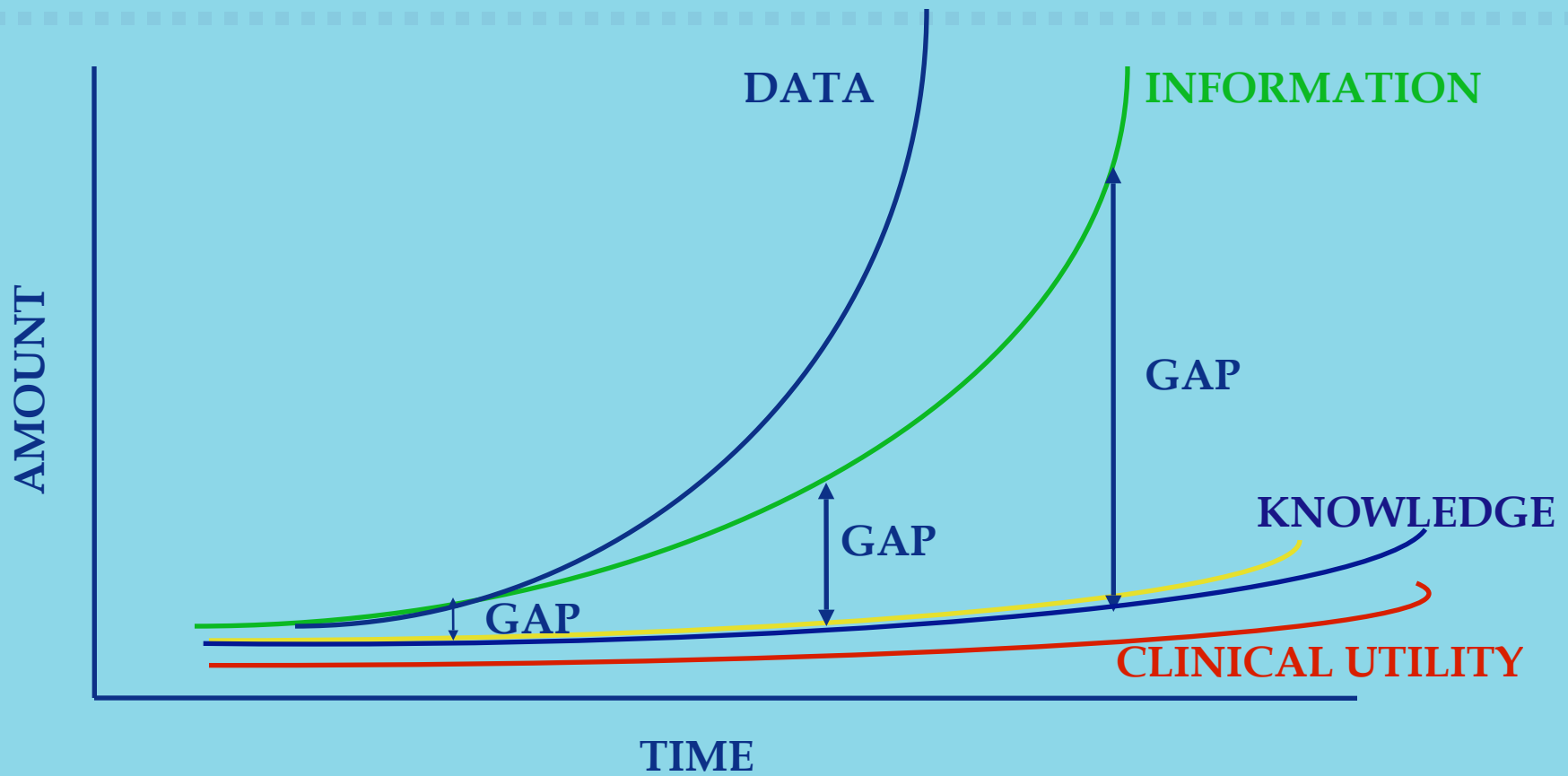
Organizational change

ICT innovation (EPR)

Perspective 2011

- ICT Care innovation:
 - Implementation of new EPR.
 - Migration and phasing of HIS.
 - Old EPR: transition policy in transition period.
 - Laboratory logistics systems and medication logistics.
- ERP Oracle eBS (Finance, Purchase, Logistics, HRM).
- Record management: value creation from data.

Value creation : data-knowledge challenge



Source: Michael N. Liebman, PhD
Executive Director Windber Research Institute

Key figures ICT

€ 25 mln

Key figures ICT

301 fte

Key figures ICT

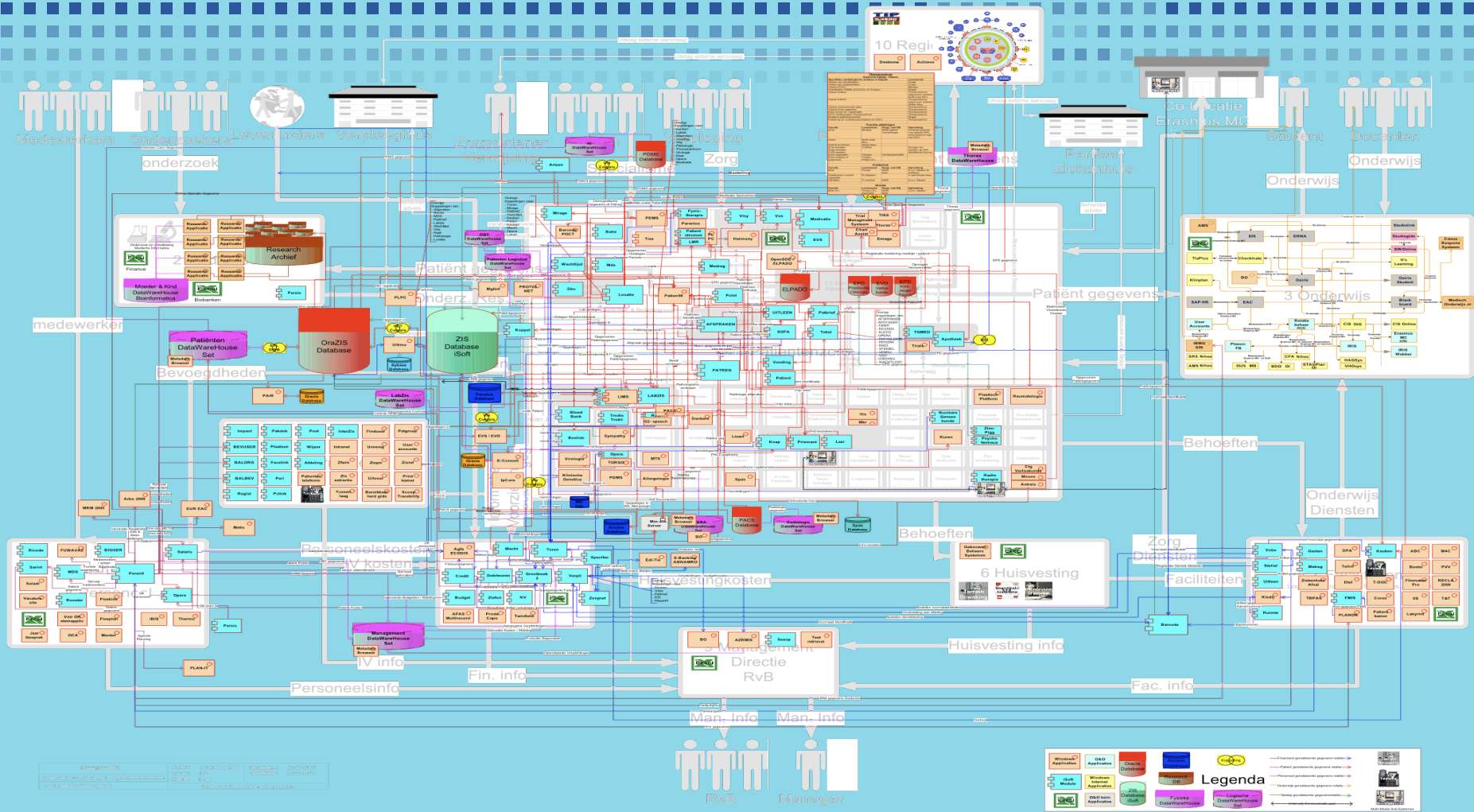
9500
workplaces

Key figures ICT

175

different applications

Current architecture



History of standardization

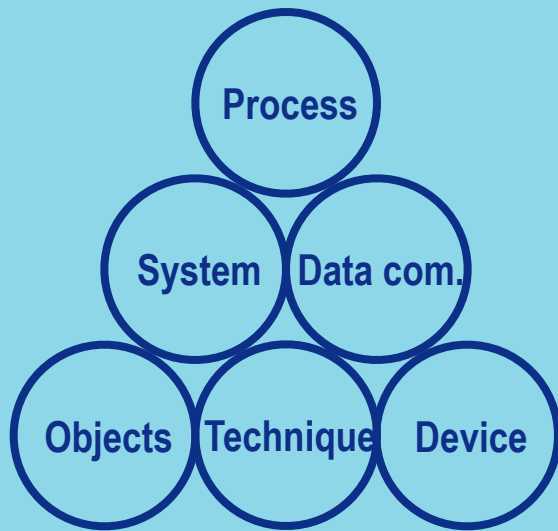
Old Dutch is a collection of city and regional dialects (9th century)

Absence of a single language.

In the 12th century it was needed for book and literary and official texts and documents



Automatic identification



- What method of working?
- Why are we doing this?
- What interface technique?

- What (patients, material e.g.)
- How (manual, RFID, barcode)
- Which (scanner, PDA e.g.)



Medication verification

L. Hanff, J. Hazelzet, I. Wouts, E. Dekker, E. Zwarter, Erasmus MC, Rotterdam

- Project on ICU Children & Pharmacy
- Reducing medication-errors

Issues

- B|Braun IV pumps, PICIS PDMS system.
- Datastructure
- Different material flows



Erasmus MC

Universitair Medisch Centrum Rotterdam

Erasmus

Project Oceanus

Electronische toedieningsregistratie op de IC

Blood transfusion

M.R. van Bohemen, J.G. Boonstra, Y.B. de Rijke, P.A.W. te Boekhorst, E. Zwarter, Erasmus MC, Rotterdam

- Project Hematology lab and clinic, OR and ICU
- Reducing failure modes
- Tracking and tracing bloodproducts


Issues:

- wristbands,
- labels,
- device.



Reservation on the lab

LabTrain Transfusie Lite

 *LabTrain Transfusie Lite*

Reserveren

Reserveren
Uitgifte
Overdracht
Toediening
Retour


Barcode werknemerspas
084840 ✓

Barcode eenheidsnummer bloedproduct
N0011 07 **198530** 罂 ✓

Barcode productcode bloedproduct
N00210A0 ✓

Barcode etiket bevestigd aan bloedproduct
3030090 N0018 09 **211713** N02880A0 ✗

Verbinding met server
✓



Issue bloodproducts from the lab

LabTrain Transfusie Lite

LabTrain Transfusie Lite

Uitgifte

Barcode uitgevend personeel ✓

Barcode etiket roze doorslag aanvraagformulier ✓

Barcode etiket bevestigd aan bloedproduct ✓

Barcode eenheidsnummer bloedproduct

Barcode productcode


Scan barcode ontvangend personeel voor akkoord van levering

Verbinding met server

1

Administration of bloodproducts

LabTrain Transfusie Lite

 *LabTrain Transfusie Lite*

Toediening


Reserveren
Uitgifte
Overdracht
Toediening
Retour

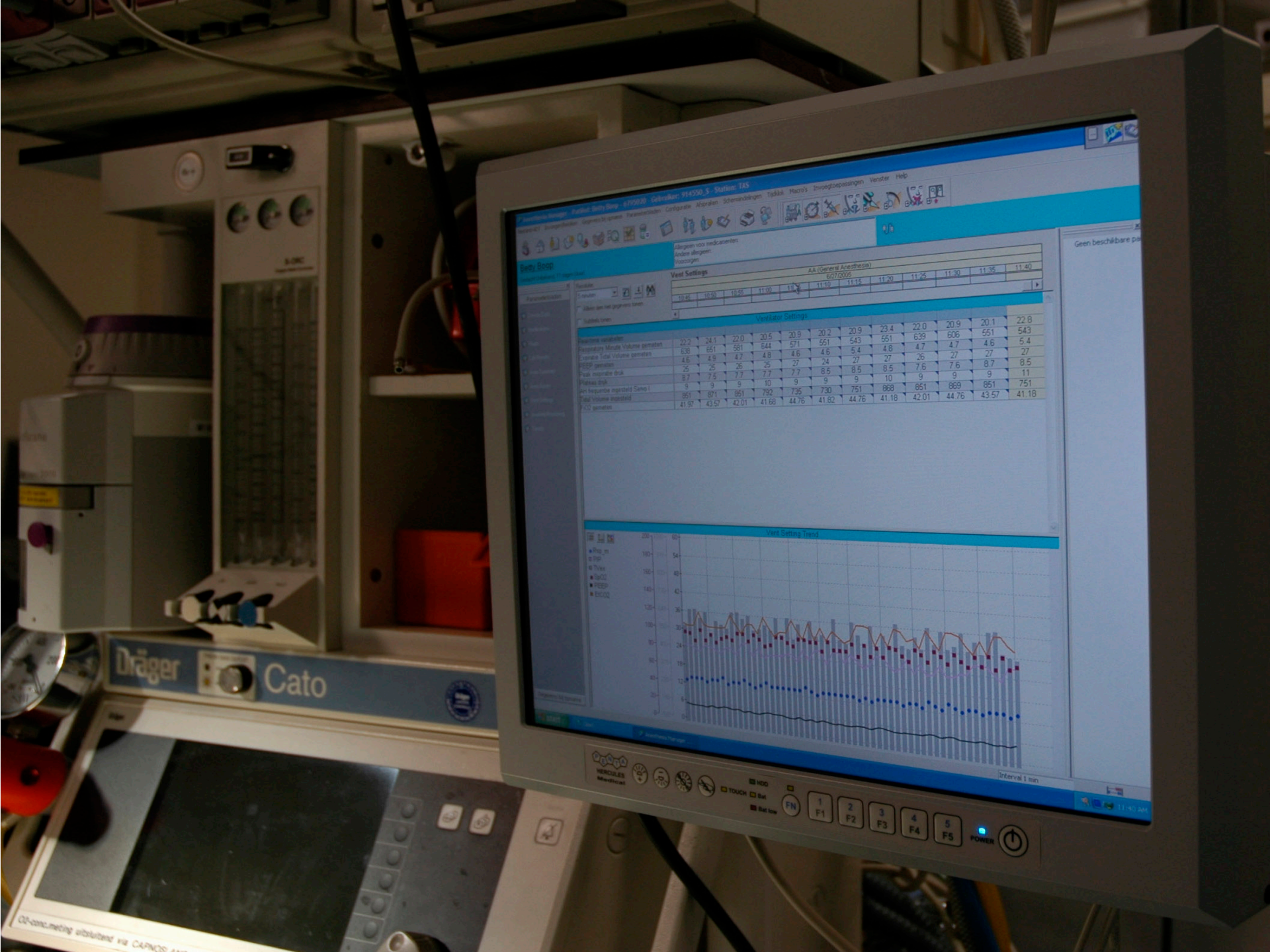
Barcode polsband patient
3030090 ✓

Barcode etiket bevestigd aan bloedproduct
3030090 N0018 09 **211713** N02880A0 ✓

Barcode toedienend personeel
084840 ✓

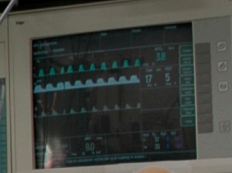
Verbinding met server ✓





Dräger Cato





Träger

Cicero EM

HOTLINE 2

Results

- Less reading errors
- Saving time because the transfusion is done by 1 nurse in stead of 2 nurses (4 eyes principle)
- KIS system
- No expensive PDA's or WIFI connections
- Monitoring process time and product quality (Hemovigilance)
- Audit trail from donor to patient

Record implants on OR

G. Kazemier, N. Nathan, M. van Houdenhoven, E. Zwarter, Erasmus MC, Rotterdam

- ✓ No more sticking labels
- ✓ paperless administration
- ✓ Costs are transparent per patient
- ✓ Consumption is known
- ✓ Recall proof

Near future

- ordering
- replenishment

Vanaf 5 oktober in dit OK complex



Het is pas bekend als je implantaten scant

LICENCE TO SCAN!



Uitgifte: Cluster 17
Vragen: e.zwarter@erasmusmc.nl



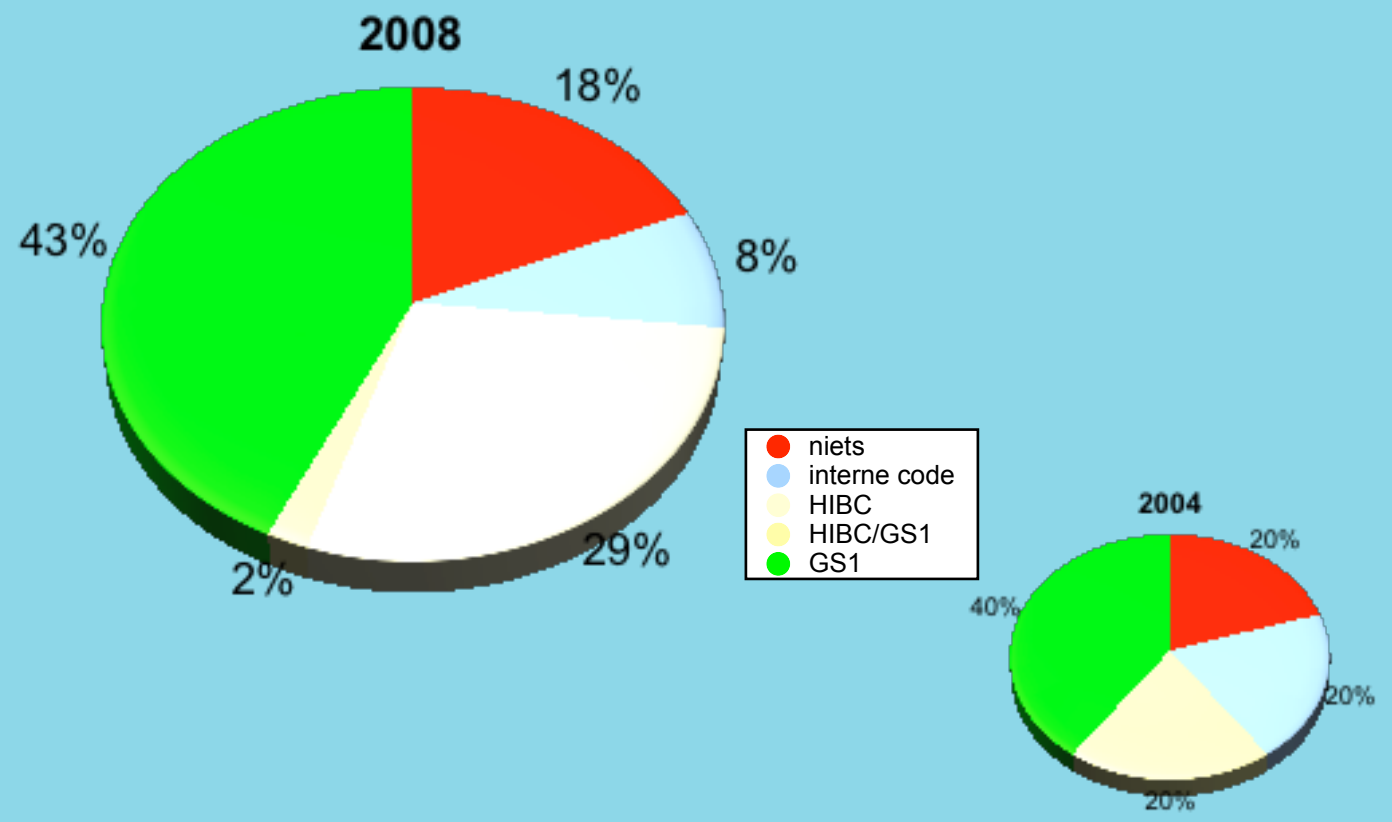
3

ARD Studio Brussels

BERICHT AUS BRÜSSEL
Phone: +32/2/2359-222

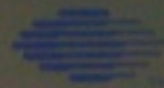
IFB: +32/2/2359-201

GS1 compliance




Examples of labels

CE
0459

 **ALLERGAN**

158
V

 **ALLERGAN**

390g

LOT

1735687



SN

14351786




REF

27-LF135-390



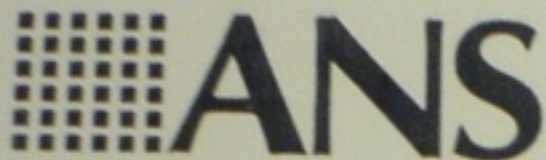
SIONAL™
M
EL™

STERILE 

2009-06



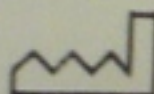
2014-06



REF

3283

Lamitrode® S-8 Lead Kit
30cm Length



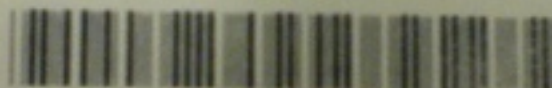
2008-03



2010-03

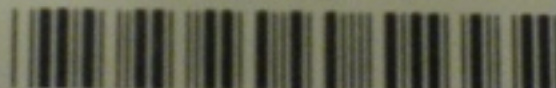
UNIT 1

PN



65-3283-03

LOT



115548

SN



N/A



See Instructions
For Use

STERILE

EO



APHAKIA

ARTISAN Aphakia 5/8.5

Power: 14.0 D

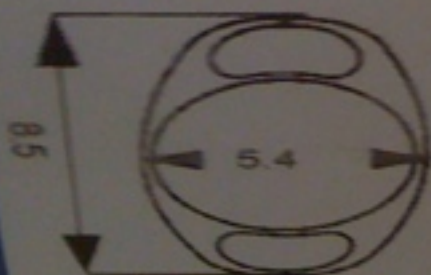
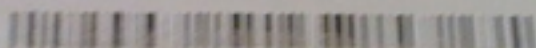


ARTISAN[®]

205001Y28



2011-02

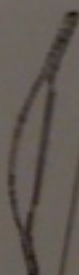


9.5

5.4



SN 1813849



Iris Fixated
BICONVEX

APPROX. A CONST. 115.0
AC-DEPTH 3.3

LOT 80933
REF 205001Y

CE
0344

Distributed by:

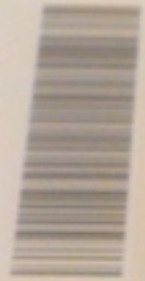
K10M07V2

CL

GRUPPVRD: 1

IMPL. BIOBALL
DUOHEAD 43MM
(HM30343) R

AFD.MAG. H-1150/1
ART NR. 1188076



merete

LOT

EXP



... mit dem BIOBALL® System kompatibel ist
... combined exclusively with the BIOBALL® Adapter
... compatible with the BIOBALL® System)

merete®
Made in Germany



BioBall® Duo 43 mm

Ohne/without BioBall® Adapter
Femoral Kopf, Head, Tête, Cabeza

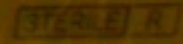


Match View / Übereinst.

REF HM30343

A: 43 mm

B: Merete BioBall® Konus



LOT J010193 2005-08 2010-06
Merete Medical GmbH, Air-Lankwitz 103, D-12247 Berlin

BIOMET

Sterile Packaged Product

Check for the following information on the package

Check for the following information on the package

Lot: 09C1781

REF



2012-02-28

LOT



09C1781

EXP



2012-02

STERILE EO

Instructions Before Use

Single Use Only

Latex Free

Valleylab™


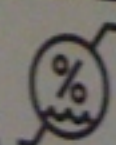


Manufactured for Valleylab
a division of Tyco Healthcare Group LP
Boulder, CO 80301-3299 USA
Tyco Healthcare UK Ltd.
Gosport, PO13 0AS, UK

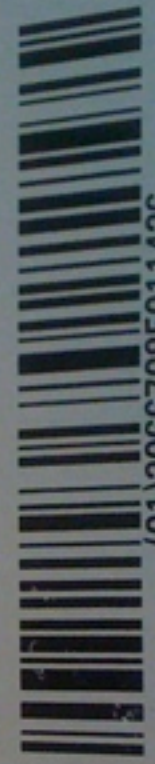
EC REP

© 2006, 2007, 2008 Valleylab. All Rights Reserved.
Made in China

tyco / Healthcare

Storage and Transport Parameters	
 <p>65°C</p> <p>-34°C</p>	 <p>75%</p> <p>0% Non</p>

CE 0086



(01)20667085011426

8295

LOT S9J0008
Exp 2014-09

REF 26-1301
LOT 077131

Effective August 2006 Distributed by:
INTEGRA **kmi**
Integra LifeSciences
311 Enterprise Drive
Plainboro, NJ 08538, USA
Ph: 1-800-545-3545
www.integra-ls.com FL-00384

UNIVERSAL2 TOTAL WRIST IMPLANT
CARPAL COMPONENT
SIZE MEDIUM

Universal Total Wrist Implant, Carpal Component, Size Medium
Universal Totalhandgelenkimplantat, Karpal-Komponente, mittel
Implanté universel complet pour poignet, composant carpien, taille moyenne
Implante de mușchi total universal, componente del carpo, tamaño mediano
Implanto Totale di Polso Universal, componente carpio, misura media



INTENDED FOR USE WITH BONE CEMENT

MAT'L: Ti 6Al-4V ELI

Caution: Federal Law (USA) Restricts this device to sale by or on the order of a physician. Please read package insert prior to use of this device.

STERILE R

European Authorized Representative
ArgoMedical GmbH
Herzog-Ernst-August Str 32
D-38518 Gifhorn Germany
Tel + 49 5371 935244

CE 0197

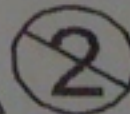
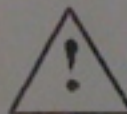
WARNING: Components are NOT modular. (Example: Size SMALL components are only interchangeable with other size SMALL components)



26-1301



077131



2013-01

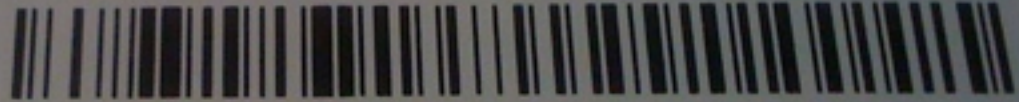
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LOT 077131

REF 26-1301 LOT 077131

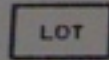
SIZE: MEDIUM
CARPAL COMPONENT
UNIVERSAL2 TOTAL WRIST IMPLANT

GPSL

SH* PS
ENE* Soft Mesh



* +14031BCE589T9*



BCE589



2014-01

• Erkende
representant autorisé
representante
autorizado



+H206GPSL2T

Pas opt
Nieuw referentienummer
12763417
Oud:

REF 99-0015/25



SN 040504/1632

R16719



19/03



US Patent Re 32 471

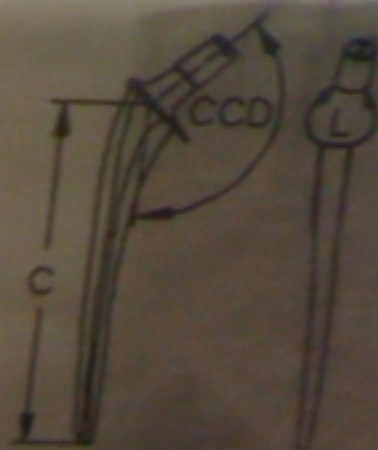
  **STERILE R**

CE0123

2007-08   2012-08

REF **12763417**

Qty.01



SN 040504/1632



(11) 070800 (21) 040504/1632

L4A

◀ 12/14 mm

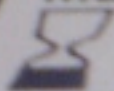
CCD= 117°

C = 130 mm

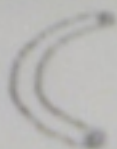
US Patent Re 32 471

R16719

MEDIPHACOS



EXP. DATE
2013-02



REF

SI5-160

250 μ



SN 080100230816900018546

Intrastromal Corneal Ring Segment, \varnothing 5mm, 160°

APICAL DIAMETER : 5 mm

ARC LENGTH : 160 °

BASE : 600 μ



EXP. DATE
2013-02

SN 080100230816900018546

LOT B0822986

(1)

ONE INTRACORNEAL RING
UMI SEGMENTO DE ANELLO
UN SEGMENTO DE ANELLO
UNO SEGMENTO DI ANELLO
UNE SEGMENT DE ANNEAU

MEDIPHACOS

ENT

BeamPath™ ENT-L

Part No. ENT-L

Length 1.5m

Diameter 1.2mm

Use Helium gas



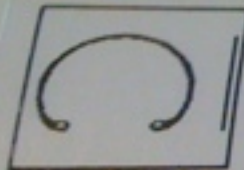
09.2010

LOT

LV090914AD-P1

Label No. L-1577 Rev. 1





Capsular Tension Ring 12/16

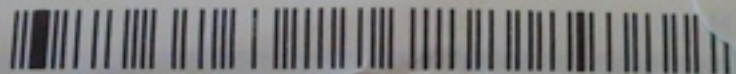


2010-02 Power

STERIEL TOT:

13 7 2007

OPHTEC

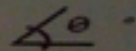


1176067 21

\varnothing_B

\varnothing_T 12.00

UV



\varnothing HOLE(S)

CE 0344

LOT 75611

SN1672795

REF 2750016

Contains one Capsular Tension Ring

Bevat een Kapselspanring • Contient un Anneau de tension capsulaire
Enthält eine Kapselstabilisierungsring • Contiene un Anillo de tension capsular • Contiene un Anello di tensione per capsula • Contém um Anel de Tensão Capsular • Περιέχει ένα δοκτύλιο τάνυσης του περιφερικού
Innehåller en spännring för linskapseln • Inneholder en Kapselst tension-ring • Sisältää yhden kapselin painereenkaan

OPHTEC

OPHTEC Ophthalmics GmbH
D-33104 Springe, Am Ende 23
Tel. +49 52 50 223-4000
Fax +49 52 50 223-4000
E-Mail: info@oph-tec.com
www.oph-tec.com



TUTOBONE®



Block

Spongiosa / Cancellous bone

Zur Implantation / for implantation

Inhalt / Content: 1 Stück / 1 piece

Größe / Size: 20 mm x 20 mm x 30 mm

REF 68302

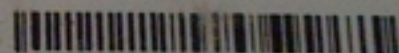


2008-04



2013-04

LOT



000000011408880

NZ-5-15.08.07

STERILE | R

K 12154

CE 1275



TUTOGEN

Tutogen Medical GmbH

Industriestraße 6
91077 Neunkirchen a. Br.
Germany

208302/3641

...ler / Processed by:

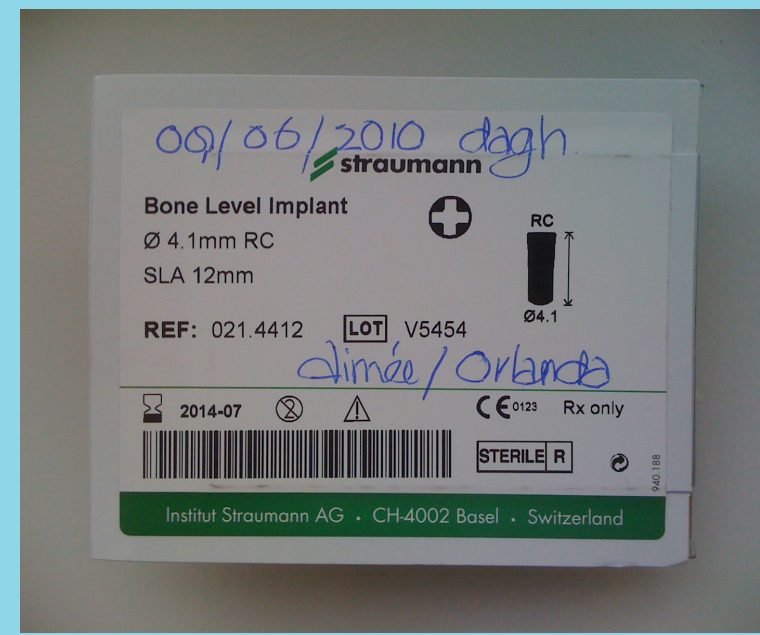
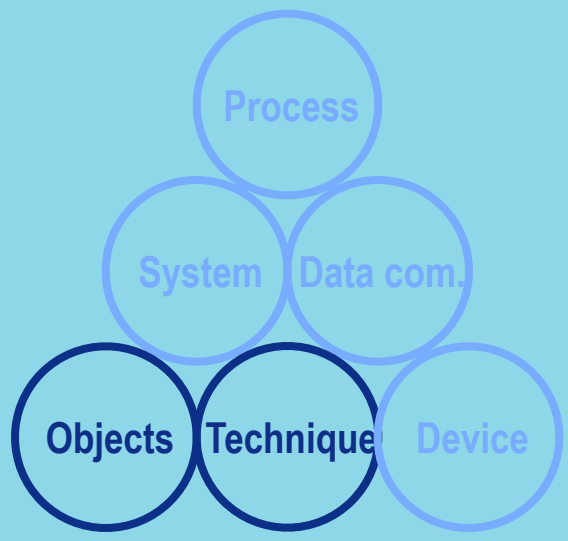
...EN MEDICAL GmbH

Mit Aufkleber für
Dokumentationszwecke

With Sticker for
Documentation Purposes

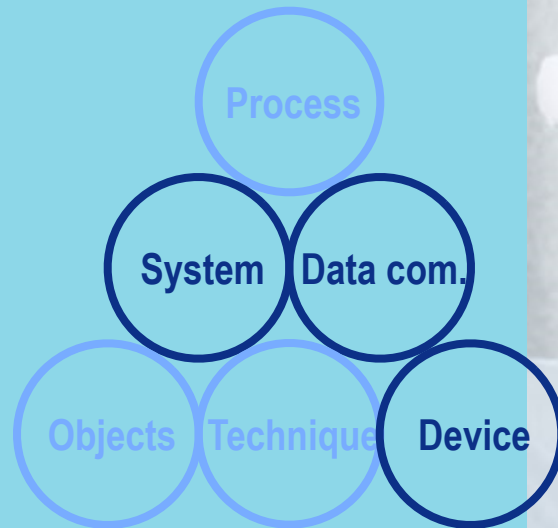
Challenges

- GS1 compliance of suppliers
- GS1 compliance of solution-providers



Challenges

- GS1 compliance of suppliers
- GS1 compliance of solution-providers

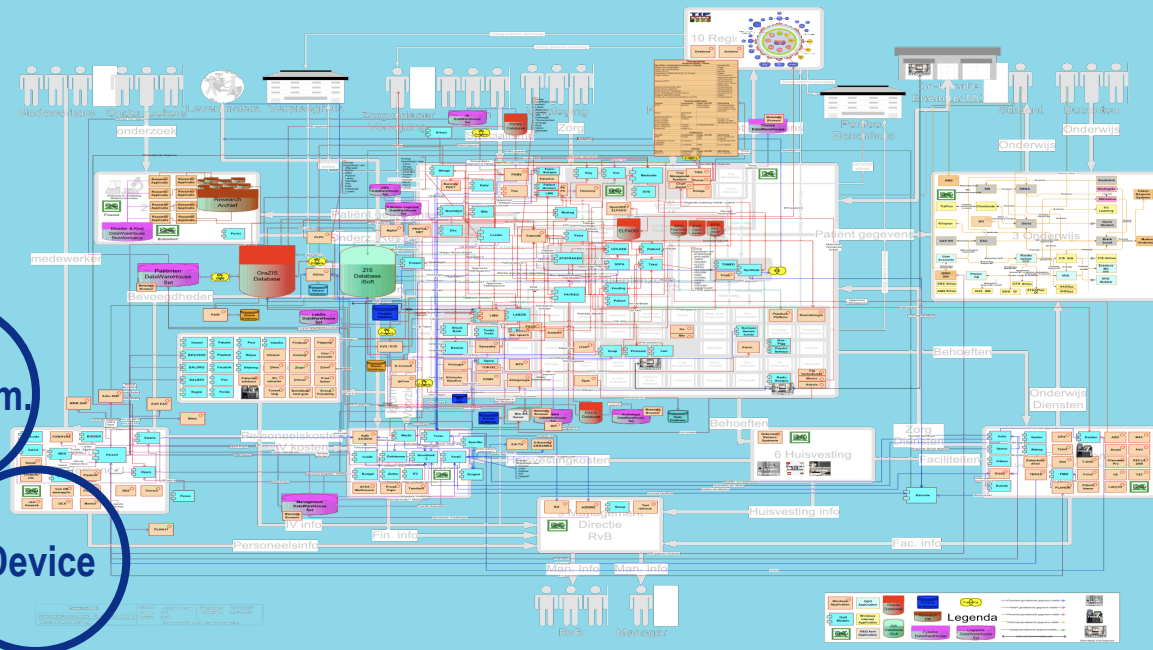
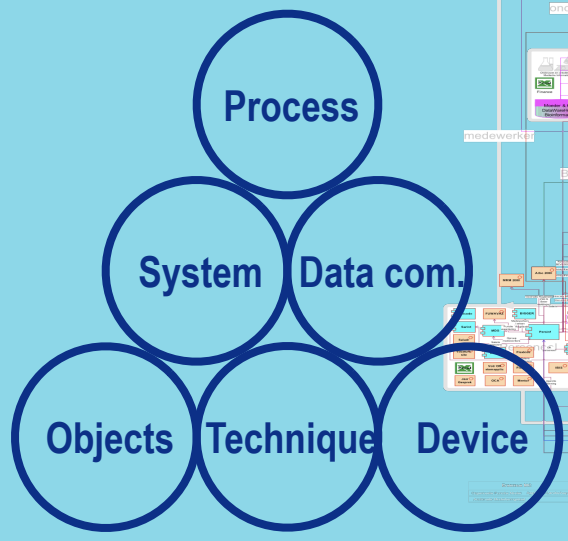


Closed Loop Verification Program

- Testing barcodes
- Testing hardware
- Contacting suppliers so improvement can begin
- International report of failures
- GS1 compliance and a quality clause in all your contracts

Challenges

- GS1 compliance hospitals



Thank you

Erik Zwarter
Project manager Healthcare logistics

Postbus 2040
3000 CA Rotterdam

Tel: 010-7033074
e.zwarter@erasmusmc.nl

