



# Cubitus baby -

An innovation giving time for saying farewell

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Midwife, Professor

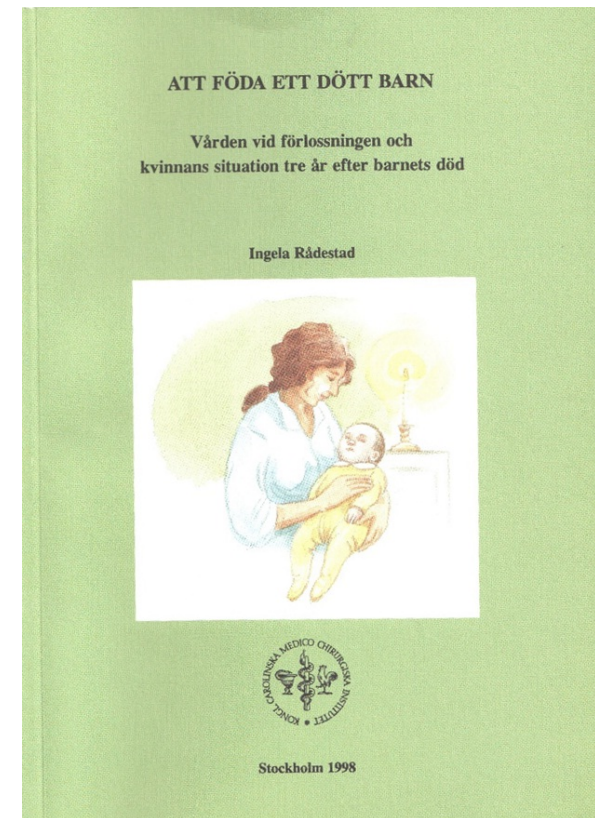


# To give birth to a stillborn baby – women's situation three years after the baby's death

If the woman had memories:  
hand and foot-prints, lock of hair  
photographs.....

If the woman had spent time with  
the baby, time to saying farewell.....

Better outcome



# Stillbirth and neonatal death

Stillborn gestational week 22+	429 (3.8/1000)
Neonatal death (0-27 days)	197 (1.8/1000)
In Sweden in 2013	626 babies

## Global

2.6 million babies are born dead each year  
98 % in low and middle income countries

# Time for saying farewell

” Many people think that the worst thing that can happen is to give birth to a dead child, but it was not so bad. The worst thing was to leave her there in the hospital.”

2.5% parents took their baby home before the funeral

665 (32%) mothers wanted to take their baby home if anyone had said that this was possible

Spädbarnsfondens Web survey in 2011



# Time for saying farewell

“When I lost my daughter two years ago, they kept her in a regular refrigerator. Not only that you lost her, but also stored in this way is terrible.”

Spädbarnsfondens Web survey, 2011



# Time for saying farewell



“Just the thought made me nauseous, that our wonderful little boy would be in a sterile cold room.”

Spädbarnsfondens Web survey, 2011

# Background to the development of Cubitus baby

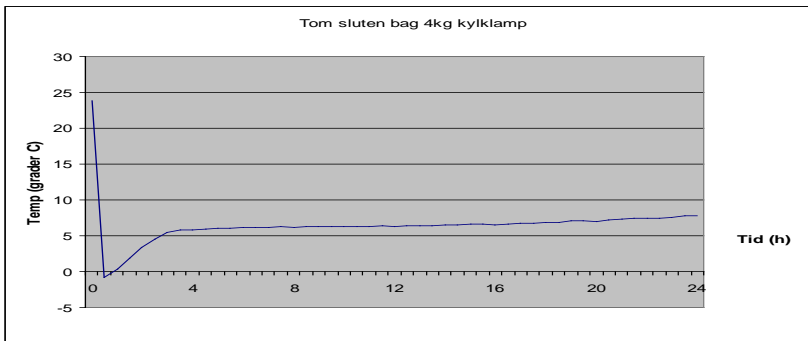
Dignity as well as to optimize the parents control of their children.

With support from *Idélab Mälardalen University* a designer could materialize my thoughts to a prototyp that could be tested in labarotory and for clinical use.





# Functional and design prototype - the cooling capacity tested in laboratory



## Criteria for the development

Keeping cool

Hygienic

Easy to use

Safe and secure

Dignified

Sustainable development



# Tested at two birth clinics

## Evaluation:

Temperature when the child was placed in Cubitus baby?

Temperature when the cooler unit was changed?

Number of times the coolers units were changed?

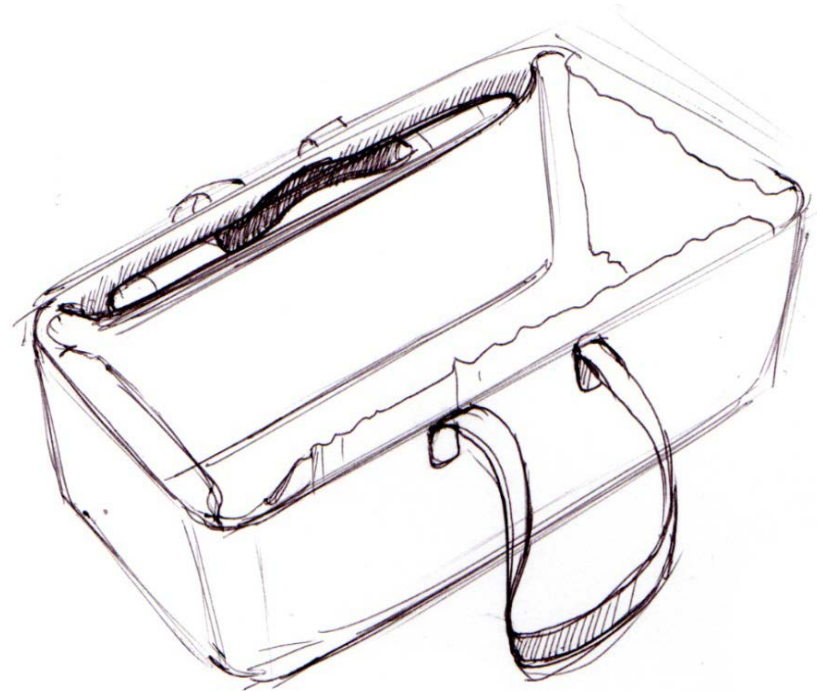
Midwives' perception of manageability?

## It works!!!

A product development team of engineers, designers, and sewing suppliers is assembled



CUBITS BATH



# Different solutions are considered

Cost

Cooling performance

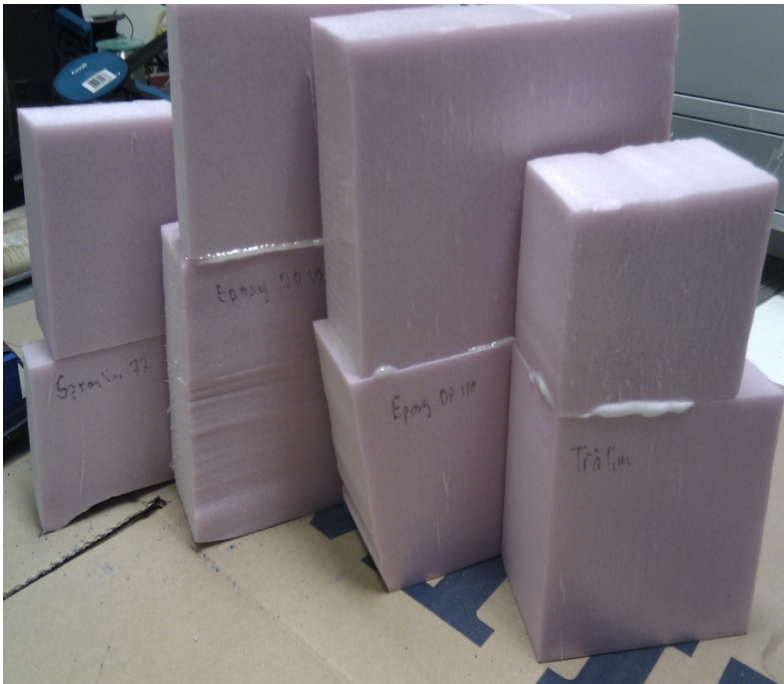
Complexity

Logistics / Storage

	kostnad 2	liggerie 1	Enkelhet (komplex?)	kyla 5	hygienisk stättbar	bärbar 3	logistisk lösning 2	
1. Frigolit	5 15	5 20	5 20	5 25	4 12	4 12	3 6	31 110
2. Vacuumformad plast + frigolit injicert	3 9	3 12	4 16	5 25	4 12	5 15	3 6	27 95
3. Barnvagnskoncept + skum	4 12	5 20	3 12	4 20	3 9	5 15	5 10	29 98
4. Rotationsgjuten	1 3	1 4	4 16	5 25	5 15	4 12	3 6	23 81
5. Varmbeackad sarg + skum	4 12	5 20	3 12	4 20	3 9	4 12	4 8	27 93
6. Ytbehandlad frigolit	5 15	4 16	5 20	5 25	4 12	4 12	3 6	30 106
7. Glasfiber + frigolit	2 6	3 12	3 12	5 25	4 12	5 15	3 6	25 90



# Testing of various methods for bonding styrofoam



# Handmade frame of foam as a base, testing the cooling block



# Simple technique for cooling





Cooling blocks can be replaced without "disturbing" the child





# Taking the baby home before the funeral



# Cubitus Baby as a coffin



# A generous donation

Ruth and Richard Julins stiftelse  
supporting the non-profit project

Production of 50 Cubitus baby  
and all distribution costs



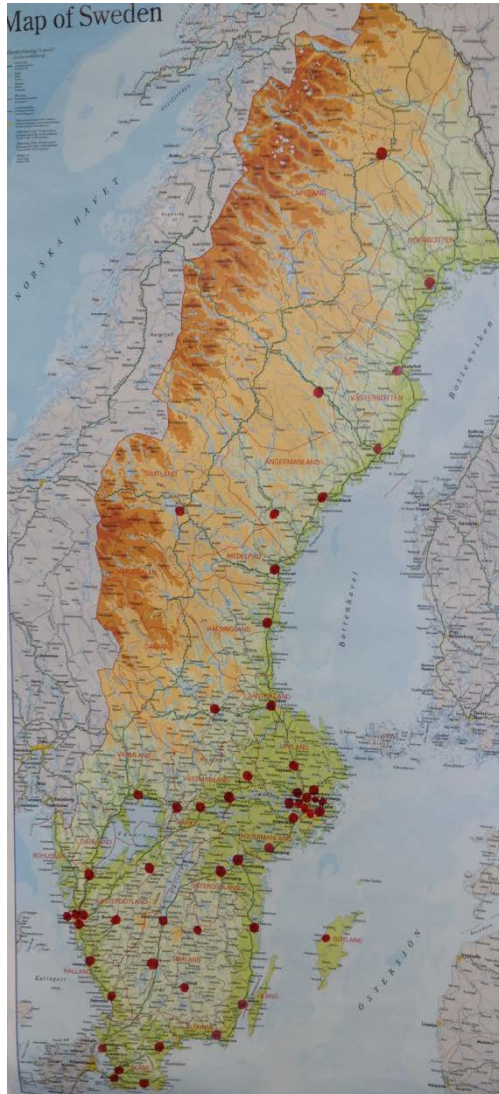


# My office before the implementation



# Implementation

13/10, 2012 - 20/11, 2014





# Documentation and research

115 unique clinical reports from the use of Cubitus baby - data collection on going

“A far greater sense of dignity in these situations”

“Great advantage to be able to have the baby in the room”

“Cosy and respectful”





# Facebook

10 000 likes and over 500 comments during 24 hours





# Honourable mention Design S, Sweden's national design award, 2014

"The product shows that design does not avoid difficult issues. Situation design at its best. Creates closeness and care in the most indescribable of moments.

With great understanding for the need for integrity and practical necessity during the heaviest grief, the product acts as a silent companion during the time needed. The absolute neutrality of the design is commended."



# From idea to implementation seven years a non-profit project



International Stillbirth Alliance conference in Birmingham **2007**  
All birth clinics in Sweden **2014**

Thanks to:  
Ruth och Richard Julins Stiftelse  
Idélab, Mälardalens högskola  
Södermanlands Sparbank  
Almi Södermanland  
Sophiahemmet ideell förening  
Spädbarnsfonden  
Baby bag



# Thanks to Innovation office KI!

Cooperation  
agreement with  
FONUS

