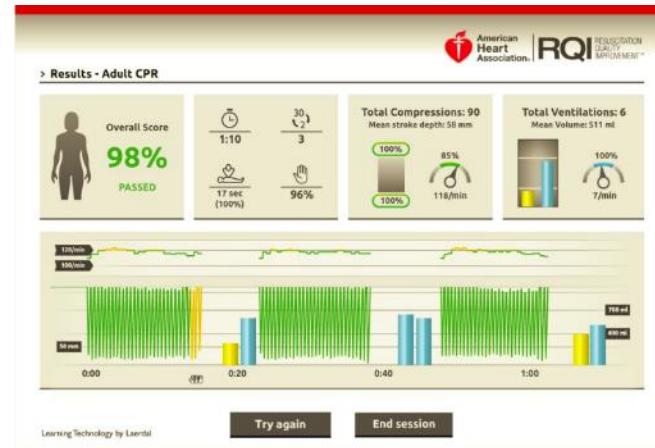


# HLR-rådet satsar på högre HLR-kvalitet med RQI



Johan Engdahl  
Ordförande, Svenska Rådet för HLR  
Docent, Överläkare



# Varför satsa på högre kvalitet på HLR?

2016-10-11

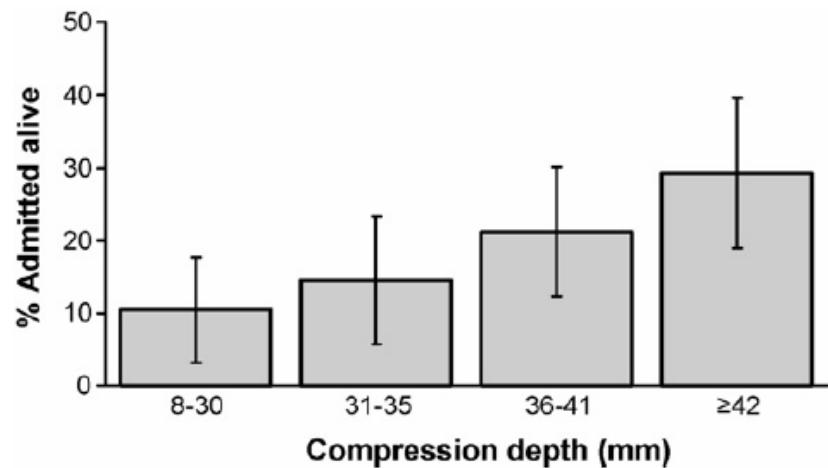
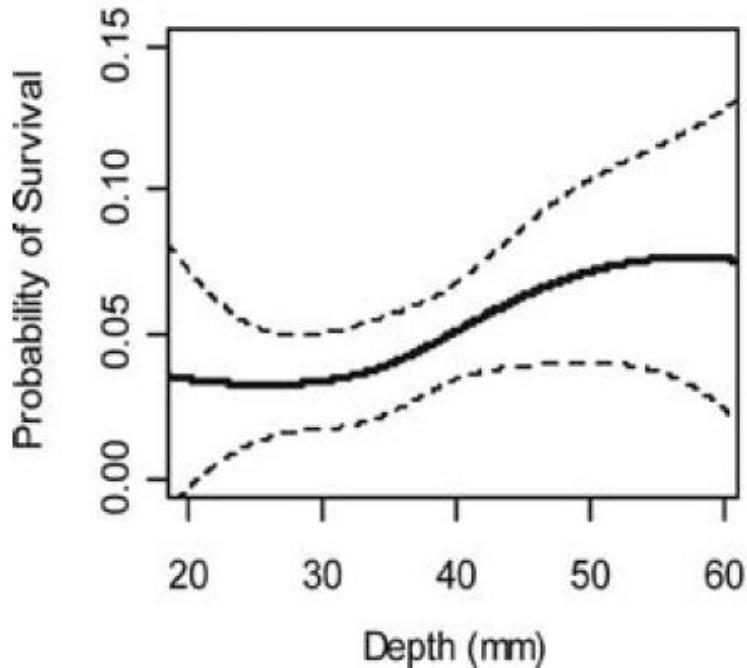


- High-quality CPR remains essential to improving outcomes.

Monsieurs, K. G., J. P. Nolan, et al. (2015). "European Resuscitation Council Guidelines for Resuscitation 2015: Section 1. Executive summary." Resuscitation 95: 1-80.

**C**

## Survival to Hospital Discharge



Stiell, I. G., S. P. Brown, J. Christenson, S. Cheskes, G. Nichol, J. Powell, B. Bigham, L. J. Morrison, J. Larsen, E. Hess, C. Vaillancourt, D. P. Davis and C. W. Callaway (2012). "What is the role of chest compression depth during out-of-hospital cardiac arrest resuscitation?" *Crit Care Med* **40(4): 1192-1198.**

Kramer-Johansen, J., H. Myklebust, et al. (2006). "Quality of out-of-hospital cardiopulmonary resuscitation with real time automated feedback: a prospective interventional study." *Resuscitation* **71(3): 283-292.**

# Gör vi inte redan bra HLR?

2016-10-11



“Compression depth was too shallow (defined as 38 mm) for **37.4%** of compressions. Ventilation rates were high, with **60.9%** of segments containing a rate of more than 20/min.”



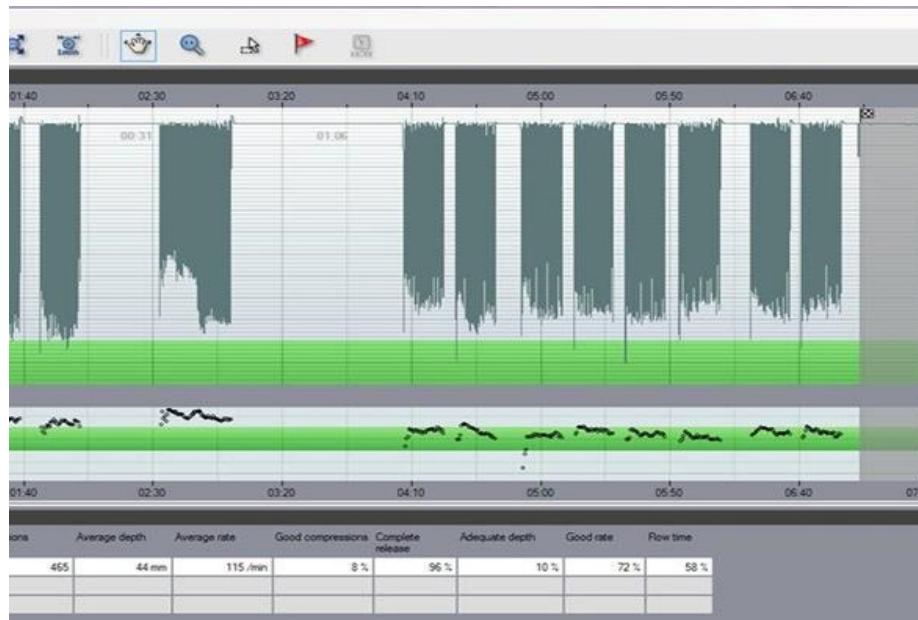
Abella, B. S., J. P. Alvarado, H. Myklebust, D. P. Edelson, A. Barry, N. O'Hearn, T. L. Vanden Hoek and L. B. Becker (2005). "Quality of cardiopulmonary resuscitation during in-hospital cardiac arrest." **JAMA 293(3): 305-310.**

- Chest compressions were not given **48%** of the time
- a mean compression rate of 64/min
- Mean compression depth was 34 mm
- **28%** of the compressions had a depth of 38 mm to 51 mm (guidelines recommendation)



Wik, L., J. Kramer-Johansen, H. Myklebust, H. Sorebo, L. Svensson, B. Fellows and P. A. Steen (2005). "Quality of cardiopulmonary resuscitation during out-of-hospital cardiac arrest." JAMA 293(3): 299-304.

# Vad finns det för hinder för god HLR-kvalitet idag?



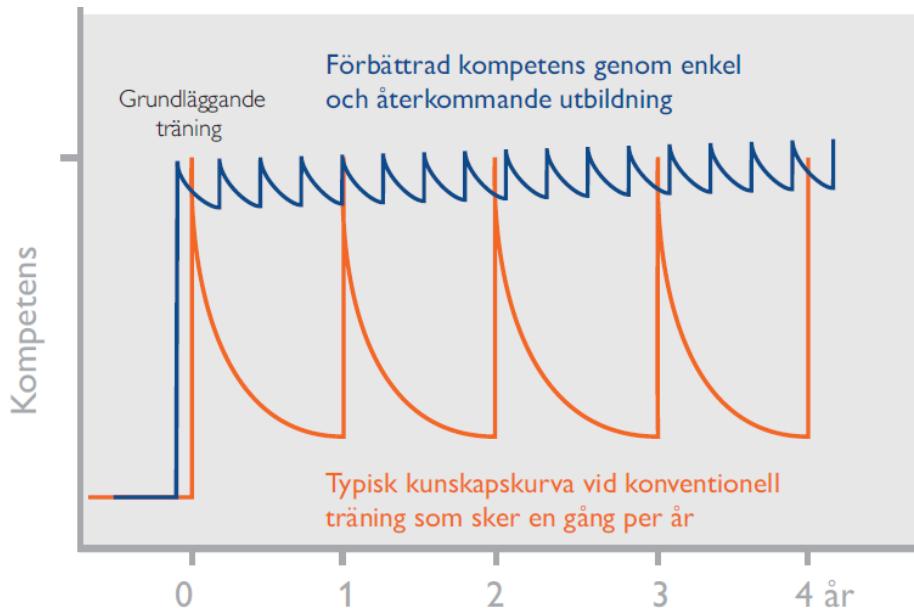
1. Uteblivna eller glesa repetitioner
2. Avsaknad av hjälpmmedel för feedback av HLR-kvalitet
3. Begränsad uppföljning efter genomförda behandlingar
4. Varierande standard och innehåll i utbildning
5. Ledarskap

# 1. Uteblivna eller glesa repetitioner

“It is known that CPR skills deteriorate within months of training and therefore annual retraining strategies may not be frequent enough.

Whilst optimal intervals are not known, frequent ‘low dose’ retraining may be beneficial.”

Monsieurs, K. G., J. P. Nolan, et al. (2015). "European Resuscitation Council Guidelines for Resuscitation 2015: Section 1. Executive summary." Resuscitation 95: 1-80.



Resuscitation 82 (2011) 447–453



Contents lists available at ScienceDirect

Resuscitation

journal homepage: [www.elsevier.com/locate/resuscitation](http://www.elsevier.com/locate/resuscitation)



Simulation and education

Effects of monthly practice on nursing students' CPR psychomotor skill performance<sup>☆</sup>

Marilyn H. Oermann <sup>a,\*</sup>, Suzan E. Kardong-Edgren <sup>b</sup>, Tamara Odom-Maryon <sup>b</sup>

<sup>a</sup> University of North Carolina at Chapel Hill, School of Nursing, 433 Carrington Hall, CB #7460, Chapel Hill, NC 27599-7460 USA

<sup>b</sup> Washington State University, College of Nursing, Box 1495, Spokane, WA 99210 USA

# 1. Uteblivna eller glesa repetitioner

- ✓ Svårt att lösa bemanning och schemaläggning
- ✓ Begränsad uppföljning av kvalitet vid repetitioner
- ✓ Separata lokaler för träning
- ✓ Begränsad uppföljning och efterfrågan av chefer
- ✓ Ingen konsekvens om repetition uteblir

## 2. Avsaknad av hjälpmmedel för feedback av HLR-kvalitet

“Directive CPR feedback devices are useful for improving compression rate, depth, release, and hand position.”



Monsieurs, K. G., J. P. Nolan, et al. (2015). "European Resuscitation Council Guidelines for Resuscitation 2015: Section 1. Executive summary." [Resuscitation 95: 1-80.](#)

# RQI systemöversikt

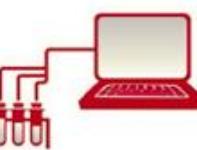
Underhåll  
av tekniska  
färdigheter



Kvartalsvis återkommande  
Utbildning och  
färdighetsträning för  
Högkvalitativ HLR



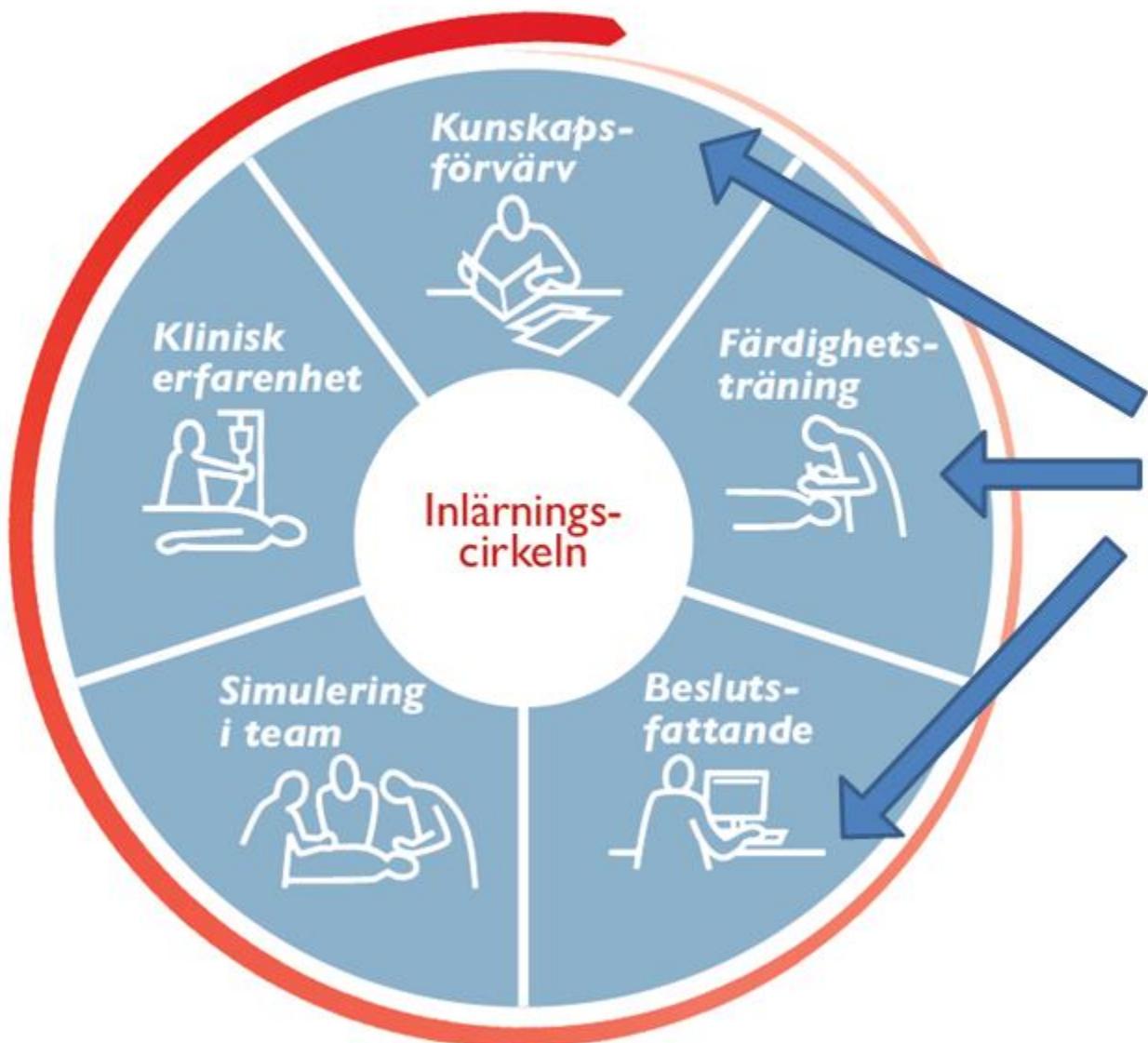
Löpande  
kompetenskort  
Som förlängs  
kontinuerligt



Automatisk uppdatering  
av nya riktlinjer

Portabel enhet för bättre  
tillgänglighet vid  
färdighetsträning





**RQI** RESUSCITATION  
QUALITY  
IMPROVEMENT®

# Tack!

2016-10-11

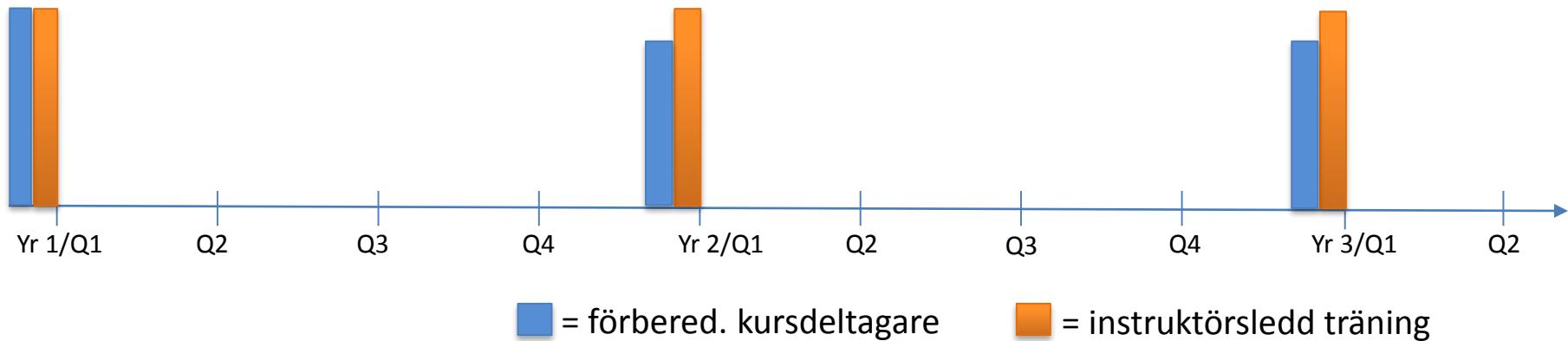


# Hur kan RQI hjälpa mig i mitt arbete som instruktör?

Annika Ehlers

Regiongruppen, Svenska Rådet för HLR  
Sjuksköterska, HLR- organisatör Arvika sjukhus

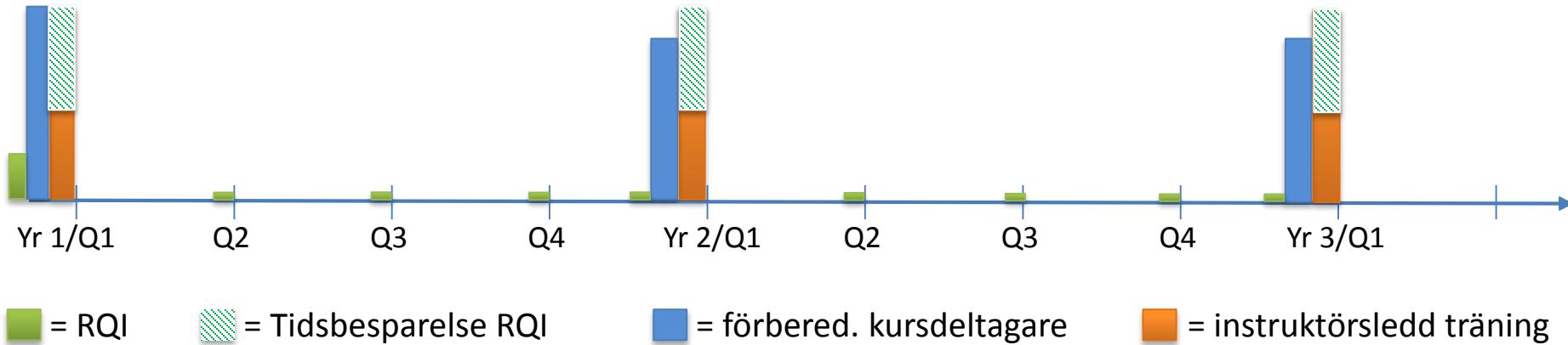
# Traditionell utbildningsmodell



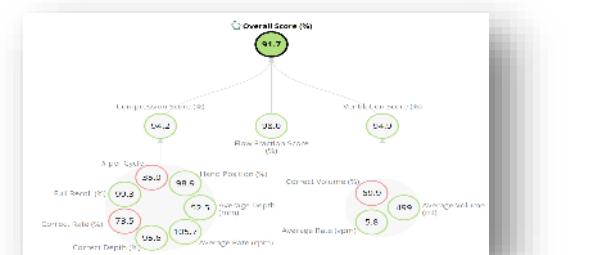
## Typiska utmaningar

- **Följsamhet/standard?**
  - Hur många genomför årlig träning/repetition?
- **Kvalitet?**
  - Hur förberedda är kursdeltagarna inför teamträning?
  - Hur ser HLR-kvaliteten ut mellan de årliga repetitionerna?
- **Kostnad och tid!**
  - Tidskrävande för instruktörer och kursdeltagare.

## Utbildningsmodell med RQI



- Frigör instruktörstid från basal HLR-träning på grund- och repetitionsutbildning.
  - Mer fokus på teamträning eller andra utbildningar (t.ex. early warning scores).
  - Högre kvalitet på teamträningen (deltagarna kommer bättre förberedda till kurserna).
  - Bättre överblick av medarbetarnas prestationer (Analytics).



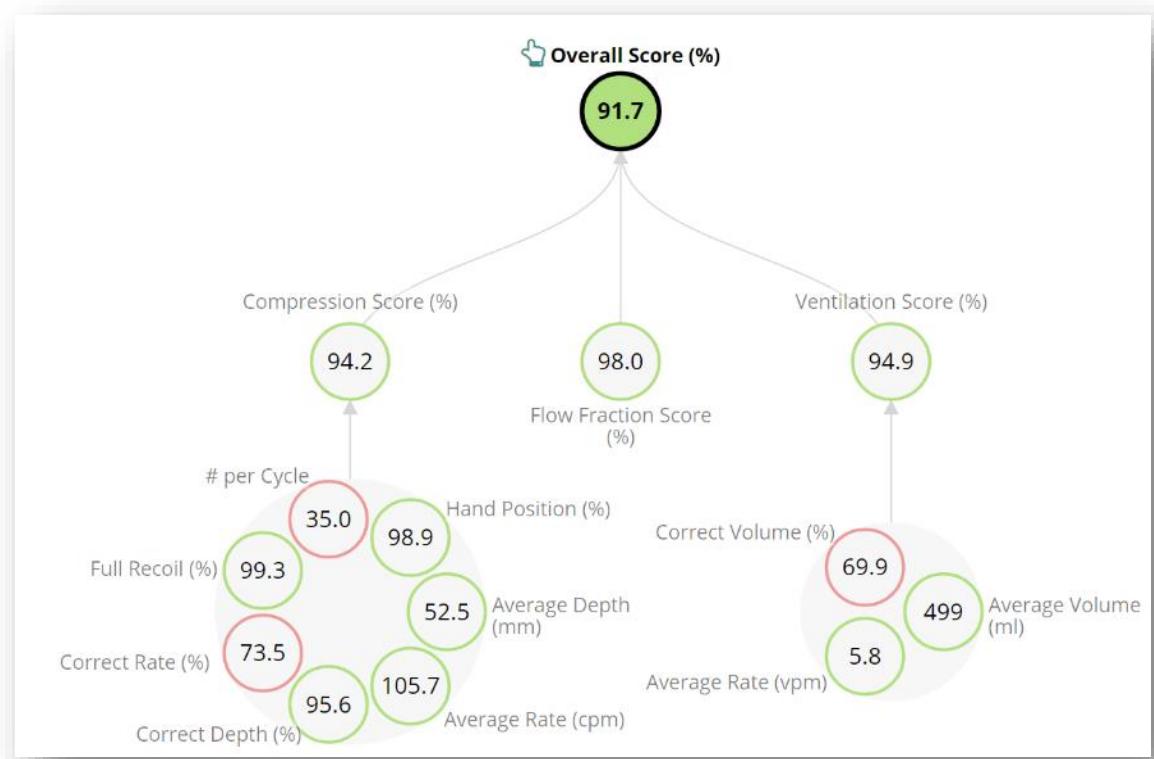
# Hur kan RQI hjälpa mig i mitt arbete som HLR- organisatör?

2016-10-11



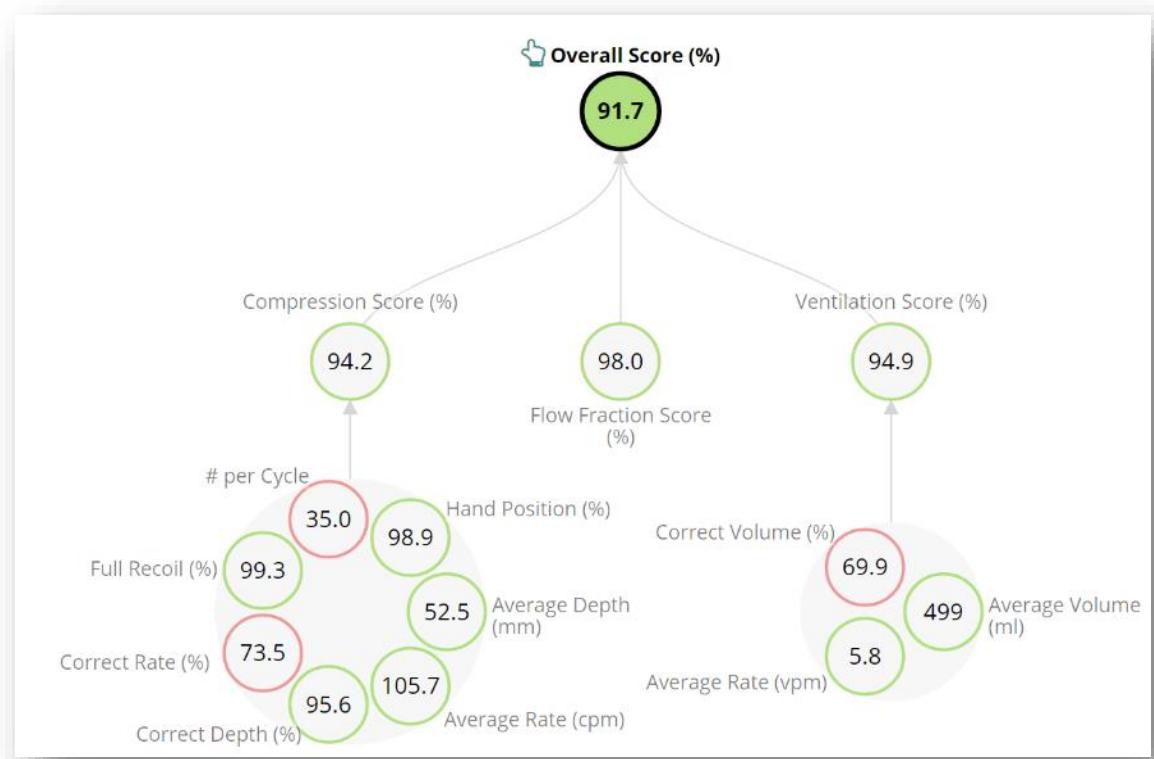
- Överblick av medarbetarnas prestationer.

## Analytics



- Överblick av medarbetarnas prestationer.
- ✓ Sjukhus

## Analytics



- **Överblick av medarbetarnas prestationer.**

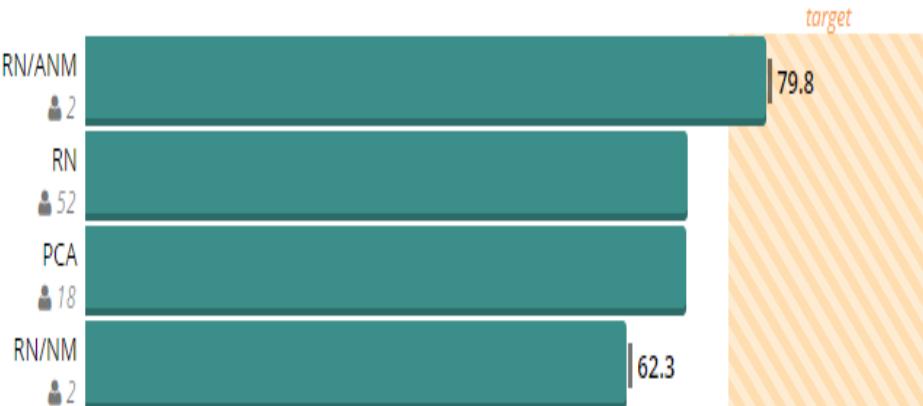
- ✓ **Sjukhus**
- ✓ **Klinik**

4. How does performance vary by Job Titles ? ▾

target

Click one or more to filter.

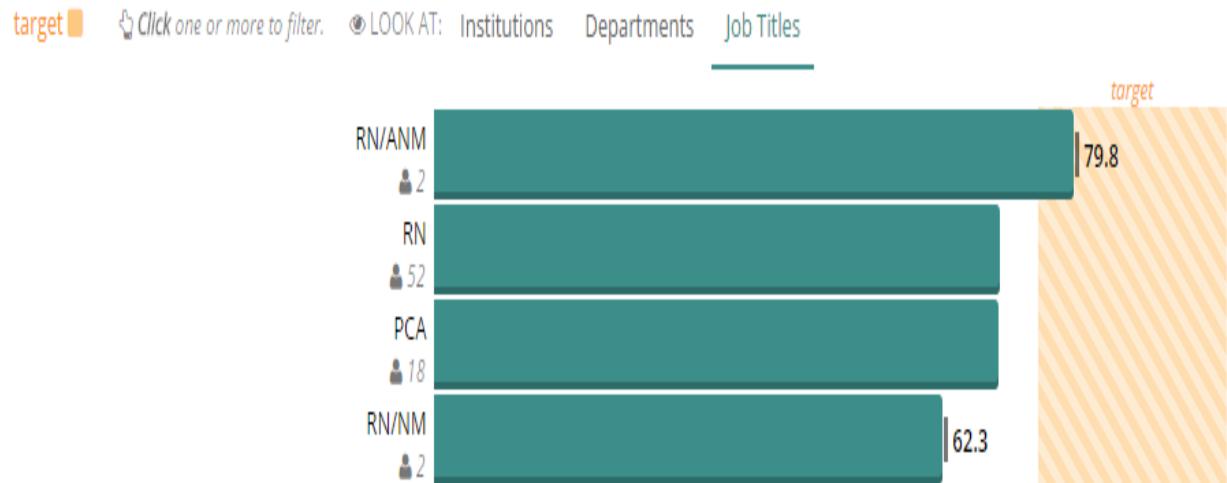
LOOK AT: Institutions Departments Job Titles



- **Överblick av medarbetarnas prestationer.**

- ✓ **Sjukhus**
- ✓ **Klinik**
- ✓ **Avdelning**

#### 4. How does performance vary by Job Titles? ▾



- **Överblick av medarbetarnas prestationer.**

- ✓ **Sjukhus**
- ✓ **Klinik**
- ✓ **Avdelning**
- ✓ **Individ**

Review [Overall Score \(%\)](#) for your **74 individual learners**.

5. How does [Overall Score \(%\)](#) vary by learner? [x 3 items](#)

[Click one or more to filter.](#) [Search](#) [🔍](#)

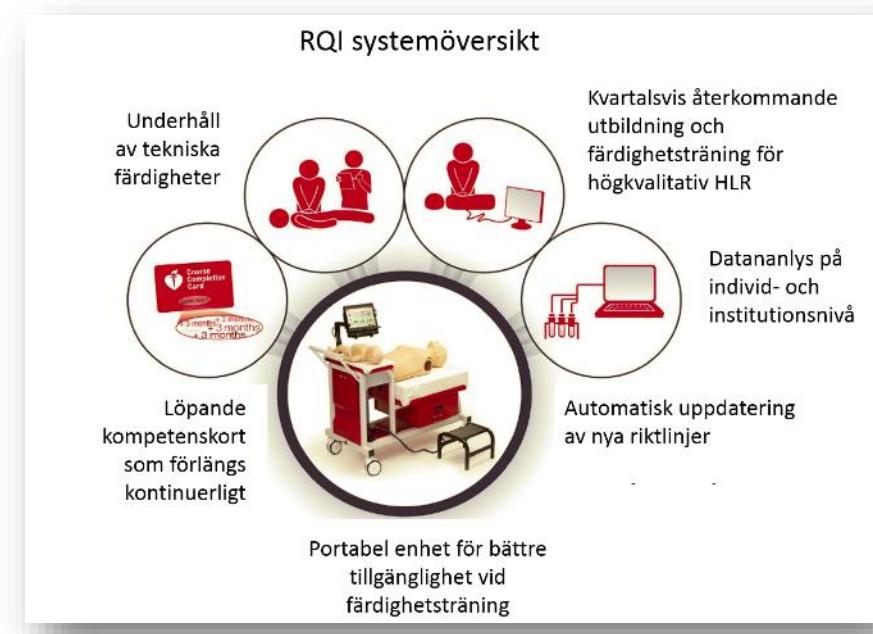
Learner name	Institution	Department	↓ Overall Score (%)
CHRISTIAN, ARTHUR	EHCXY-Scott Asbury Facility	XTJVD-Dermatology Department	99.0
TYLER, JIMMY	EHCXY-Scott Asbury Facility	XTJVD-Dermatology Department	99.0
KEMNITZ, BRANDON	EHCXY-Scott Asbury Facility	XTJVD-Dermatology Department	98.0
WILSON, ELEANOR	EHCXY-Scott Asbury Facility	XTJVD-Dermatology Department	98.0
JACKSON, DAVID	EHCXY-Scott Asbury Facility	XTJVD-Dermatology Department	98.0
CALLAHAN, PATRICIA	EHCXY-Scott Asbury Facility	XTJVD-Dermatology Department	98.0
FISHER, LONNIE	EHCXY-Scott Asbury Facility	XTJVD-Dermatology Department	97.0
MILLER, JERRY	EHCXY-Scott Asbury Facility	XTJVD-Dermatology Department	96.0
HUNT, MARY	EHCXY-Scott Asbury Facility	XTJVD-Dermatology Department	96.0
MEYER, ALICE	EHCXY-Scott Asbury Facility	XTJVD-Dermatology Department	96.0

# Implementering?

2016-10-11



- **Ledningens beslut om införande.**



- **Ledningens beslut om införande.**

✓ **Tidsbesparing!**

2016-10-11



Traditional training:

Staff  $\times$  1000  $\times$  Traditional training (3,5 hrs) = 3500 hrs / year

RQI:

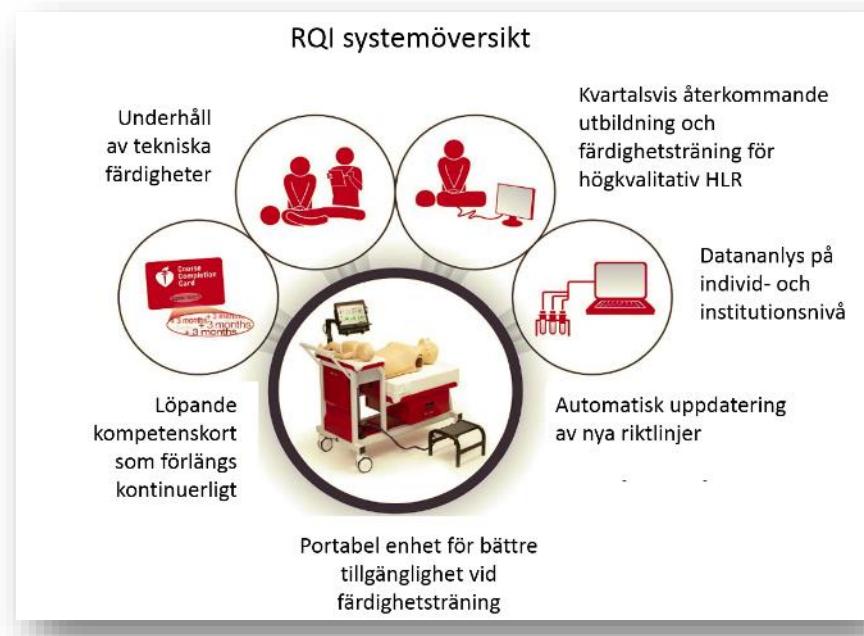
Staff  $\times$  1000  $\times$  RQI (2,5 hrs) = 2500 hrs / year

RQI: Minimum 1000 hrs saved pr. year.

- **Ledningens beslut om införande.**

- ✓ **Tidsbesparing!**
- ✓ **Tid är pengar!**

2016-10-11



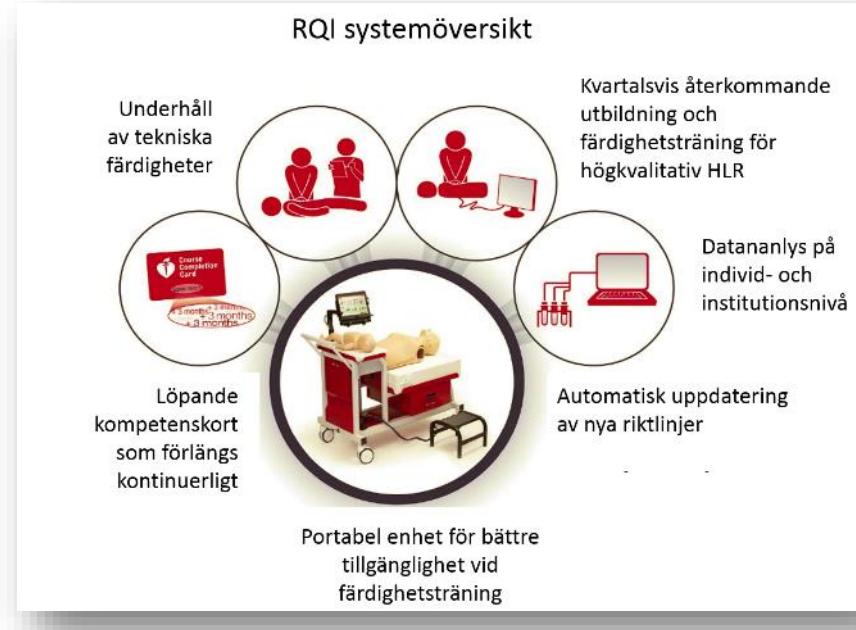
- **Ledningens beslut om införande.**

- ✓ **Tidsbesparing!**
- ✓ **Tid är pengar!**
- ✓ **HLR med HÖG kvalitet!**



- **Ledningens beslut om införande.**

- ✓ **Tidsbesparing!**
- ✓ **Tid är pengar!**
- ✓ **HLR med HÖG kvalitet!**
- ✓ **Hjärtsäkert sjukhus!**

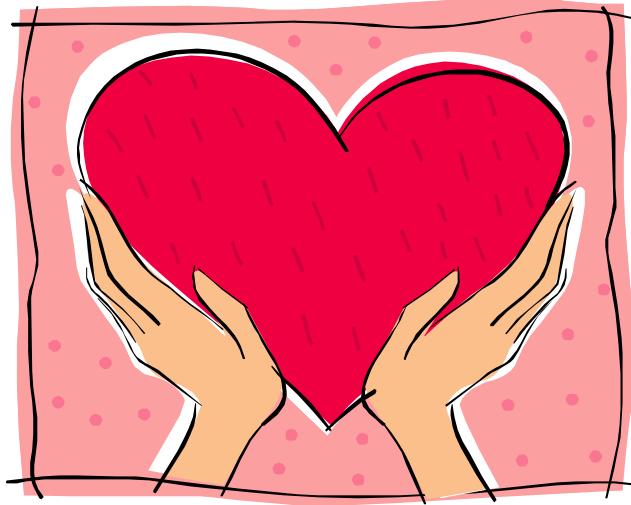


# Vad är vårt mål?

2016-10-11



# Ökad överlevnad!



2016-10-11



# Tack!

[annica.ehlers@liv.se](mailto:annica.ehlers@liv.se)

2016-10-11

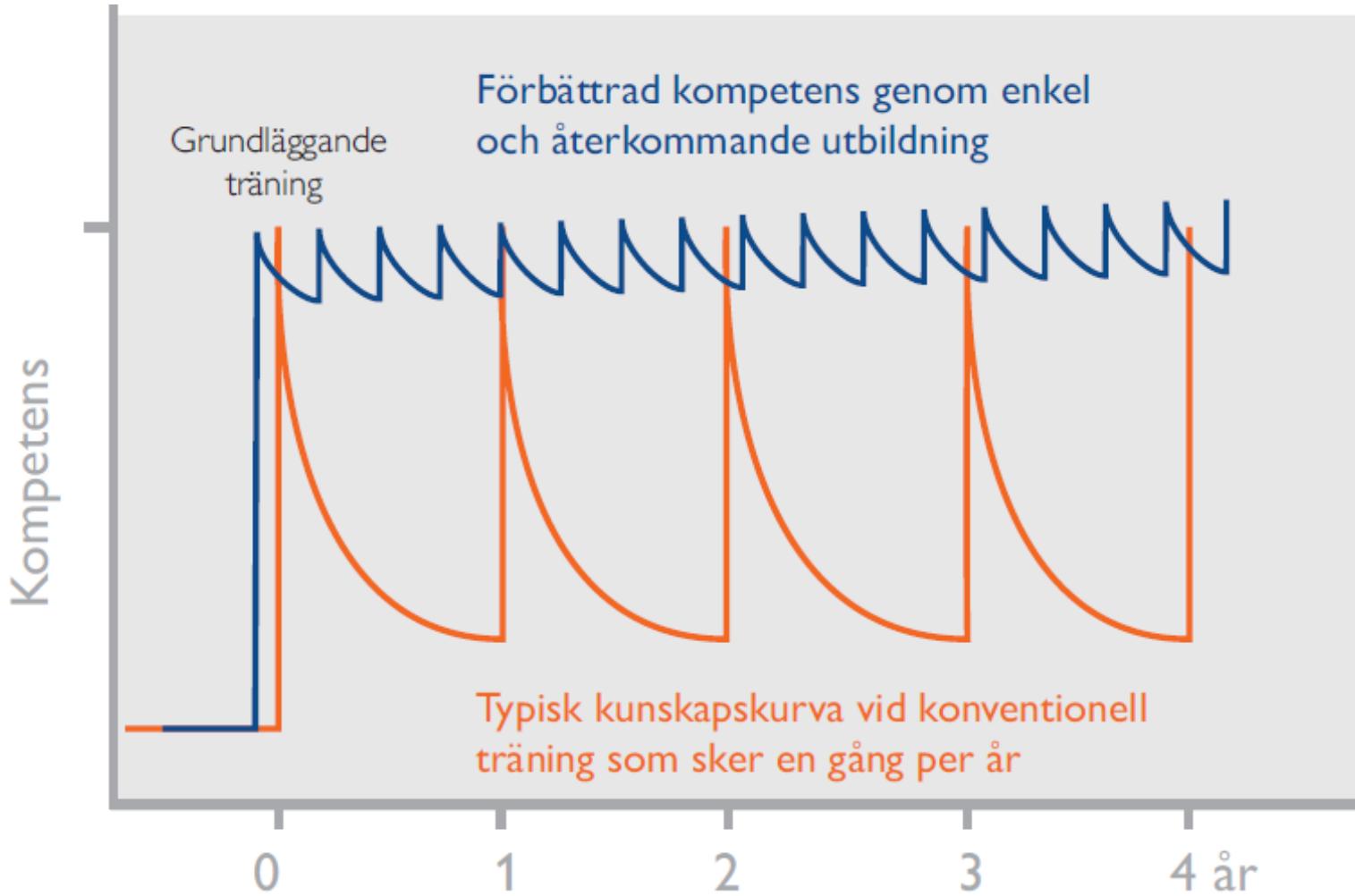


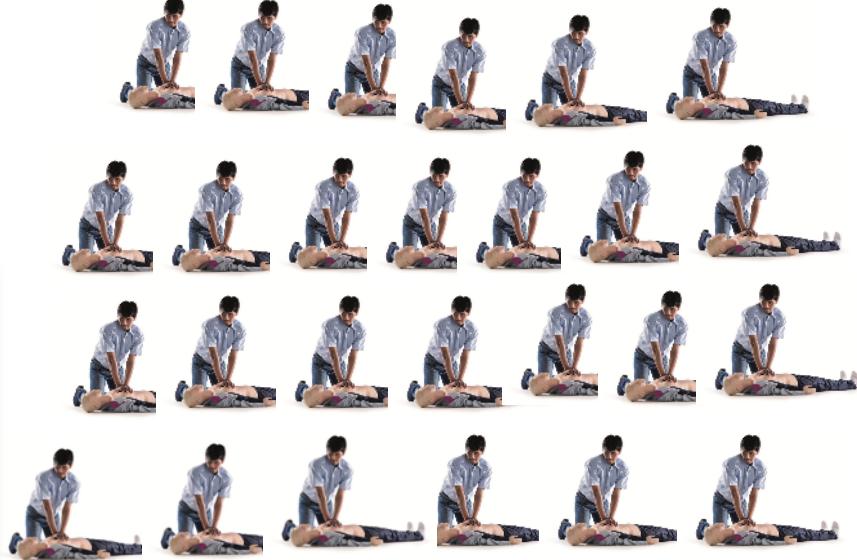
# Hvordan implementerer man RQI?

Michael Kammer Jensen  
Nordic Program Manager,  
Laerdal Medical

2016-10-11







# RQI Program Administration with SimManager Express



**Laerdal**  
helping save lives

**HLR** **rådet**  
SVENSKA RÄDET FÖR HJÄRT- OCH LUNGRÄDDNING





# RESUSCITATION



## Sign In

User ID

Password

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[Password reminder](#) [Forgot your password?](#)



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# RESUSCITATION

[To Do](#)[Completed](#)[Profile ▾](#)[Catalog](#)[Upcoming Events](#)[Help](#) [Take a Tour](#)

## My To-Do List

[Quick Start ▶](#)

TOTAL TASKS: 3

Show: [All Tasks 3](#)[Assignments 1](#)[Electives 2](#)

### RQI BLS

[MOC CURRICULUM](#)

STATUS: In Progress COMPLETED: 0 of 10

Due: Oct 17, 2017

[Resume](#)

### Manikin Activity - AU-017-Infant CPR 15:2, Australia

[COURSE](#)

STATUS: In Progress ENROLLED BY: Self

COMPLETED: 0 of 1

Elective

[Resume](#)

### Manikin Activity - Infant 1-Rescuer CPR, Australia

[COURSE](#)

STATUS: In Progress ENROLLED BY: Self

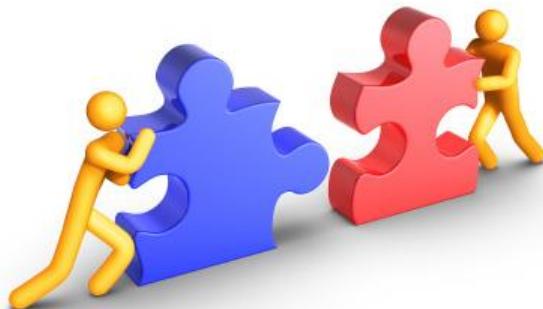
COMPLETED: 0 of 1

Elective

[Resume](#)

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Overview

Compliance

Skills

Cognitive

Leaderboard

Reset

Add Filters by Date, Department, Job Title and more...



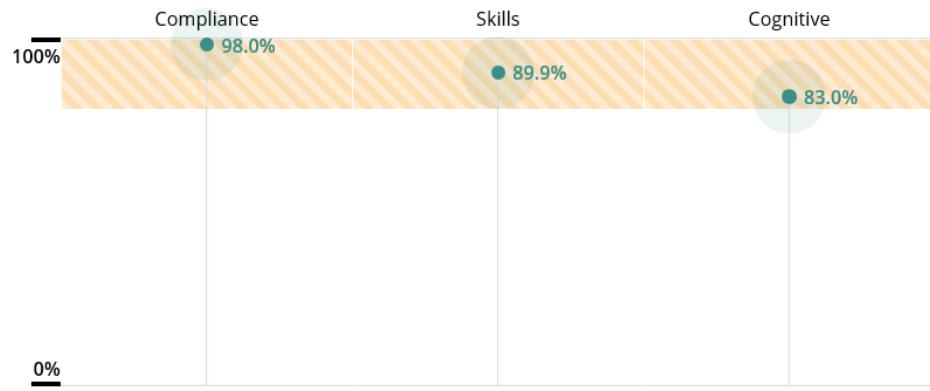
## What's the status?

Learning Technology by Laerdal

Here's a top level overview of your learners' performance.

### 1. What are the accumulated scores?

Score ● Goal ■ Click to explore a score in detail.



Overview

Compliance

Skills

Cognitive

Leaderboard

Reset

Add Filters by Date, Department, Job Title and more...



## Are learners completing activities on time?

Learning Technology by Laerdal

Compliance rate represents the portion of assigned learning activities that are not yet overdue. ▾

Compliance rate: **98.02%**

Explore learning activity completions by curriculum

1. Which curriculum has best or worst compliance? ▾

Click to filter one or more curricula

SHOW:

All

Selected

SORT BY: Compliance %

# Learning Activities

Alphabetical

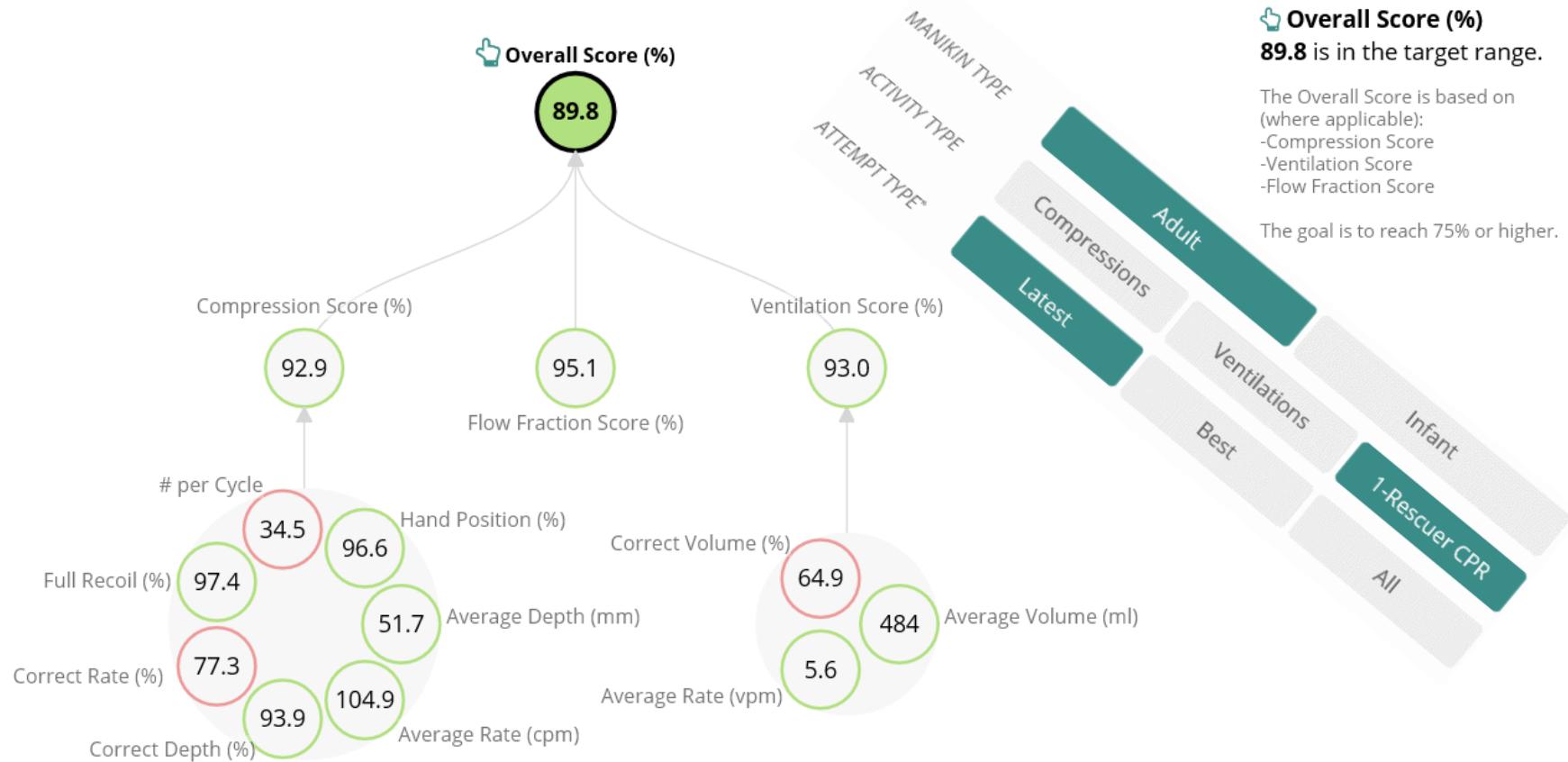
Search



## 1. What contributes to Overall Score? ▾

Overall Score (%)

In Target ● Outside Target ○ Click to filter on a specific metric.



Overall Score (%)  
89.8 is in the target range.

The Overall Score is based on (where applicable):  
-Compression Score  
-Ventilation Score  
-Flow Fraction Score

The goal is to reach 75% or higher.

## 1. Compare **Adult** performance by **Department** ▾

LOOK AT: [Top 20](#) [Bottom 20](#) [Top & Bottom](#)

MANIKIN

LEVEL

Adult

Infant

Learner

Department

Job Title

Institution

### Compressions

SYJNC-Radiology Department	<b>99.5%</b>
DQBKM-Audiology Department	<b>95.0%</b>
ONJPK-Billing Department	<b>93.8%</b>
MLKOS-Neurology Department	<b>93.5%</b>
NAPBS-Plastic Surgery Department	<b>92.3%</b>
BIYEU-Medical Records Department	<b>91.6%</b>
EFHXY-Billing Department	<b>91.6%</b>
RQUOC-Pharmacy Department	<b>91.4%</b>
HSLSY-Endocrinology Department	<b>90.0%</b>

### Ventilations

DQBKM-Audiology Department	<b>99.0%</b>
SYJNC-Radiology Department	<b>98.7%</b>
BIYEU-Medical Records Department	<b>95.1%</b>
NAPBS-Plastic Surgery Department	<b>93.3%</b>
MLKOS-Neurology Department	<b>93.2%</b>
RQUOC-Pharmacy Department	<b>93.2%</b>
ONJPK-Billing Department	<b>92.1%</b>
EFHXY-Billing Department	<b>91.8%</b>
HSLSY-Endocrinology Department	<b>86.0%</b>

### 1-Rescuer CPR

SYJNC-Radiology Department	<b>99.0%</b>
HSLSY-Endocrinology Department	<b>96.0%</b>
NAPBS-Plastic Surgery Department	<b>96.0%</b>
ONJPK-Billing Department	<b>91.7%</b>
MLKOS-Neurology Department	<b>91.2%</b>

# Front-end



# Back-end



American Heart Association | RQI | Learning Technology by Laerdal

Are learners completing activities on time?

Compliance rate represents the portion of assigned learning activities that are not yet overdue.

Compliance rate: **98.02%**



For more information, see  
[www.laerdal.se](http://www.laerdal.se) and [www.hlr.nu](http://www.hlr.nu)