

Anticoagulation Quality & Safety Metrics

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Overview of KP Anticoagulation

- 7 Regions, > 100k patients
 - CS > 38k
 - Monday-Friday Telecare clinic
 - Panel sizes average 650 pts per pharmacist & 1200 pts per technician
- US 2010: New agents started to hit market
 - RELY TTR 64%
 - ROCKET-AF TTR 55%
 - ARISTOTLE TTR 62%
- 2011 KP started to track TTR

REGION	PATIENT_COUNT
CS	38,670
MA	4,659
HI	2,424
GA	1,889
CO	9,327
NW	8,000
CN	41,803
TOTAL	106,772

* Time in the therapeutic Range TTR

Pharmacist's Role

TTR IMPROVEMENT

- Consistent 1 point ranges
- Patients TTR < 60 switch to another therapy
- No tamper zone
- Decision support dosing
- Return intervals – stable vs non

*TSOAs

- Medication Adherence
- Risk factor dose adjustment
- Drug Interaction review
- Annual Scr Lab
- OR report

SAFETY

- Daily reports
 - New Rx
 - Drug-Drug Intxn
 - Hospital admits
- Weekly reports
 - Tablet size
 - GI procedure
- Monthly reports
 - QA

* Target Specific Oral Anticoag

Time in the therapeutic INR range (TTR)

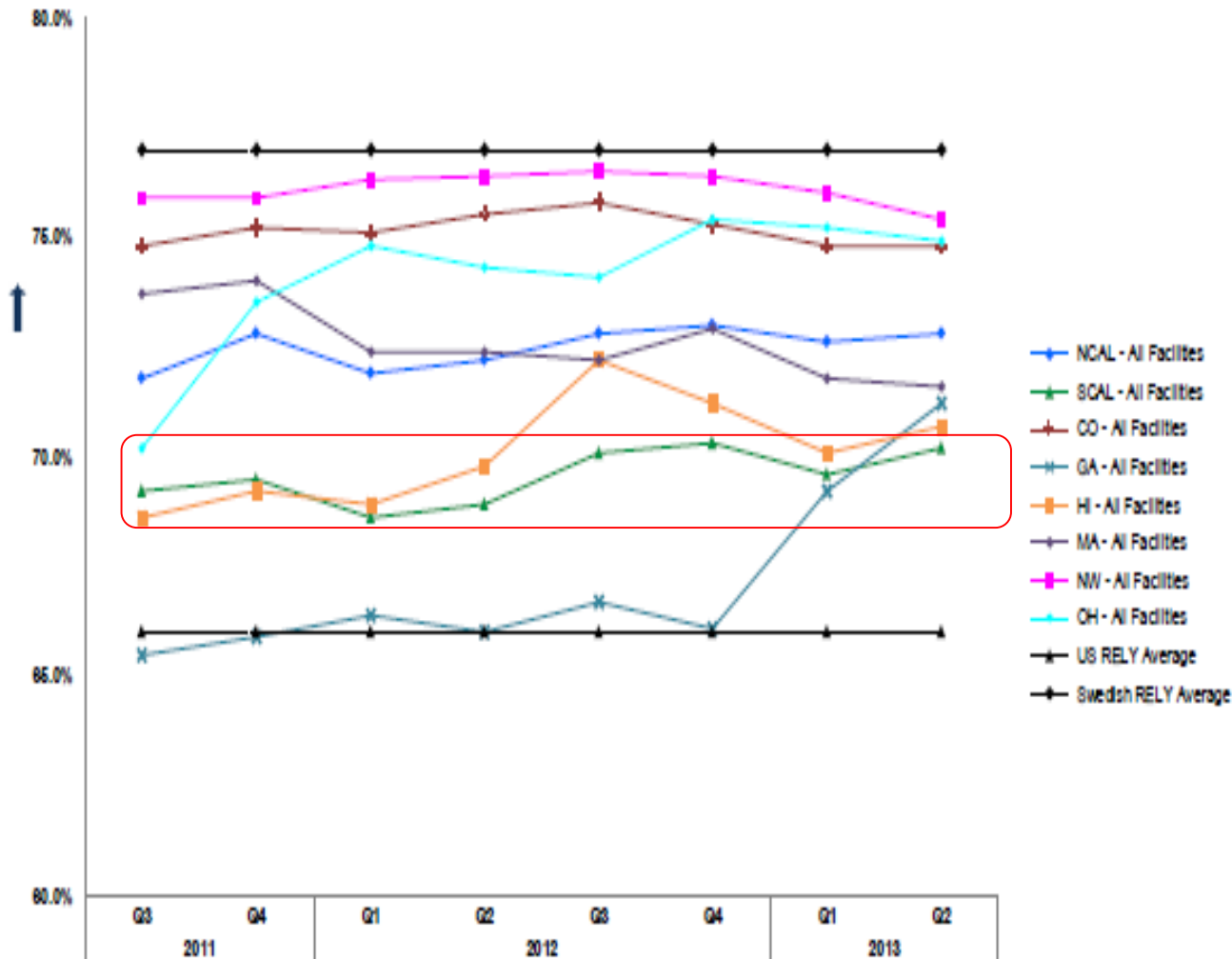
Population: A-Fib, Rolling 6 Months

	NCAL	SCAL	CO	GA	HI	MAS	NW
TTR (July 2013)	72%	69%	73%	68%	70%	70%	74%
TTR Risk Adjusted (July 2011-June 2012)	71%	69%	71%	70%	71%	71%	72%
TTR Atrial Fibrillation (July 2013)	73%	71%	75%	70%	72%	72%	75%

Time in the therapeutic INR range (TTR) utilizes linear interpolation between successive INR measurements and is commonly referred to as the Rosendaal method. It estimates the proportion of days the INR is within, above, or below the therapeutic range. This report displays information only for patients taking warfarin to prevent stroke due to atrial fibrillation. The benchmarks represent the Swedish national average TTR (77%) and the US national average TTR (66%). "Average" represents average among RELY study participants, and therefore the upper end of the curve for warfarin management.

TTR Trend 2011- Q2 2013

Population: A-Fib, Rolling 6 Months



Facilities	Q2'12	Q2'13
Sweden RELY Average	0.77	0.77
NCAL - Hayward	0.76	0.76
NW - All Facilities	0.76	0.75
OH - All Facilities	0.74	0.75
NCAL - So. Sacramento	0.71	0.75
CO - All Facilities	0.76	0.75
NCAL - Richmond	0.74	0.75
SCAL - Los Angeles	0.70	0.74
NCAL - Fresno	0.74	0.74
NCAL - Oakland	0.71	0.73
NCAL - Roseville	0.74	0.73
NCAL - San Jose	0.72	0.73
NCAL - Santa Clara	0.73	0.73
NCAL - Walnut Creek	0.72	0.73
SCAL - Woodland Hills	0.70	0.73
NCAL - All Facilities	0.72	0.73
NCAL - Sacramento	0.73	0.73
NCAL - So. San Francisco	0.72	0.73
NCAL - San Francisco	0.71	0.72
SCAL - Baldwin Park	0.69	0.72
MA - All Facilities	0.72	0.72
NCAL - San Rafael	0.72	0.72
NCAL - Vallejo	0.70	0.71
GA - All Facilities	0.66	0.71
SCAL - Orange County	0.70	0.71
HI - All Facilities	0.70	0.71
SCAL - Panorama City	0.68	0.71
SCAL - South Bay	0.68	0.71
NCAL - Santa Rosa	0.71	0.70
NCAL - Stockton	0.71	0.70
SCAL - All Facilities	0.69	0.70
SCAL - Downey	0.71	0.70
SCAL - Riverside	0.69	0.69
SCAL - Kern County	0.67	0.69
SCAL - San Diego	0.68	0.69
SCAL - Fontana	0.70	0.68
SCAL - West La	0.67	0.68
US RELY Average	0.66	0.66

Quality Assurance Events - CA 2012

	TSOAs	Warfarin
Hemorrhagic Events/%	23/3.77%	2615/3.73%
Thromboembolic Events/%	8/1.31%	848/1.21%
Patient Years	610	70,138

TSOAs Medication Adherence Rates - CS 2013

	MRAR %
Dabigatran (Pradaxa)	90.95
Rivaroxaban (Xarelto)	90.75