

The Impact of Radiology Trainees on Productivity of Academic Radiologists; Analysis using the Ottawa RADiologist Activity Reporting (RADAR) System



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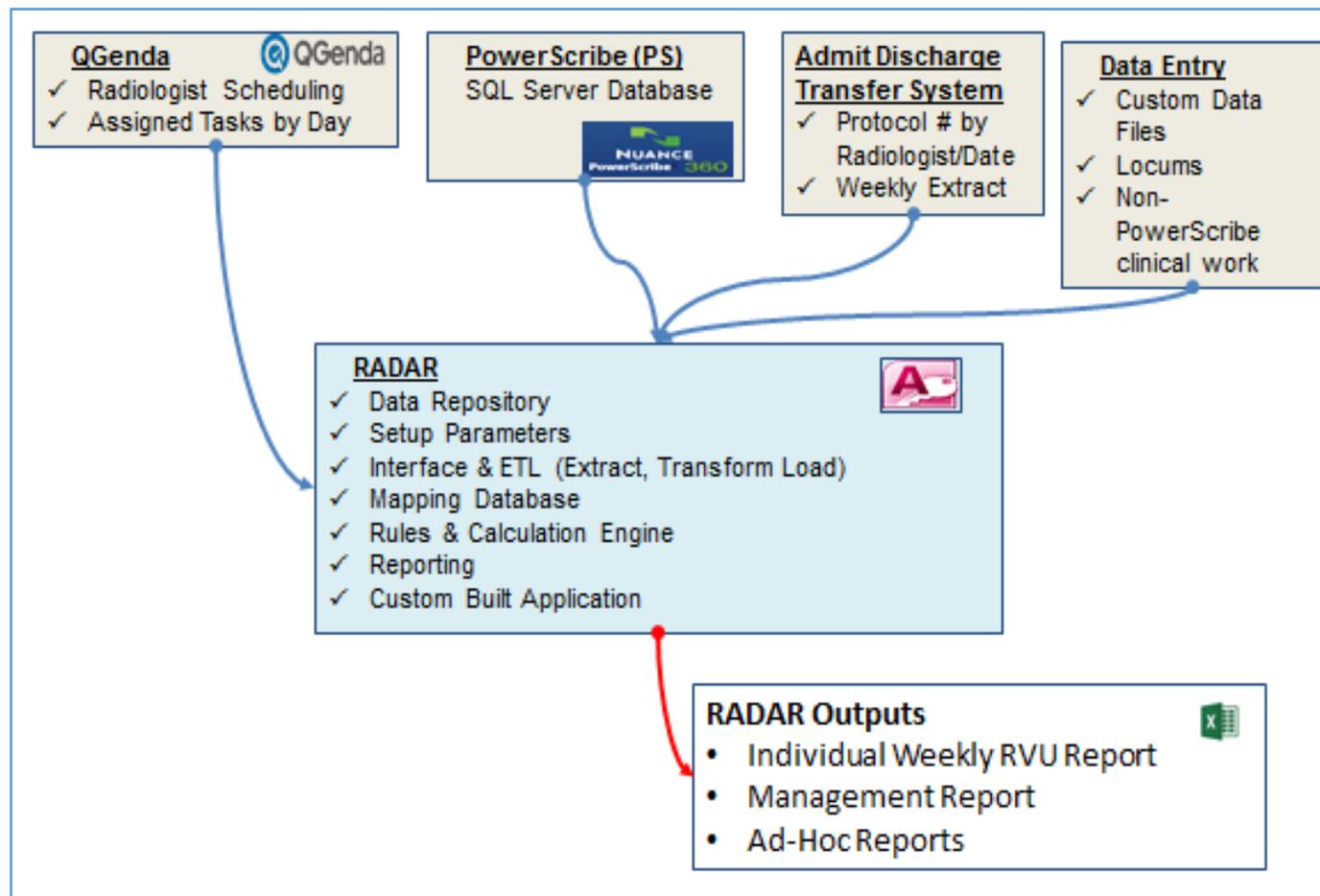
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Introduction:

The Ottawa Hospital RADIologist Activity Reporting (RADAR) metric is a single productivity benchmark that has positively influenced clinical productivity after its implementation and reporting.

There is a paucity of peer-reviewed data regarding workflow and productivity for academic radiologists who participate in clinical training.

RADAR Infrastructure:



RADAR points are awarded for clinical tasks (e.g., CT abdomen/pelvis, CT head, etc.) as well as non-clinical tasks (e.g., multidisciplinary rounds and teaching).

This allows for quantitative assessment of productivity which is comprised of individual weekly reports, management level reports, and custom queries such as to address the ongoing question of the influence of trainees on productivity.

Purpose:

The purpose of this study is to test the hypothesis that productivity measures are not compromised by the presence of trainees in an academic radiology setting.

Methods:

RADAR points were extracted for all radiologists on a daily basis between December 2012 and June 2016. Data stratified by 25 radiologists spanning 2369 working days fulfilled the following inclusion criteria:

- Two clinical tasks: Body CT and Body MR.
- Full clinical days.
- RADAR points were delineated by presence of a trainee.

Results:

	Body CT solo	Body CT with trainee	Body MR solo	Body MR with trainee
RADAR points	30953	146344	13854	112240
Number of days	301	1142	117	809
Mean RADAR points per day	103	128	118	139
P-value solo vs with trainee	< 0.001		< 0.001	

- The range and standard deviation for mean daily RADAR points are 73 to 163, and 23 respectively.
- The proportion of RADAR points generated with a trainee initiating the report was 42% and 51% for CT and MR respectively.
- Considering both CT and MR, the mean daily RADAR points was 128.
- Radiologists reporting with trainees had a mean of 133 points, versus Radiologists reporting without trainees had 107 points.

Conclusion:

The RADAR point productivity system enables comprehensive analyses, in this case the opportunity to study the impact of radiology trainees on productivity of academic radiologists.

The presence of trainees does not decrease clinical productivity in the interpretation of abdominal CT and MRI studies. In fact, radiologist productivity increases with trainees.

Limitations:

- The only clinical tasks included were Body CT and MR.
- RADAR productivity is not stratified by experience of the trainee.
- The need to sign trainee reports may add a variable amount of time to the work day.
- RADAR points assigned to a given day are delineated by the day the report is initiated as opposed to signed.