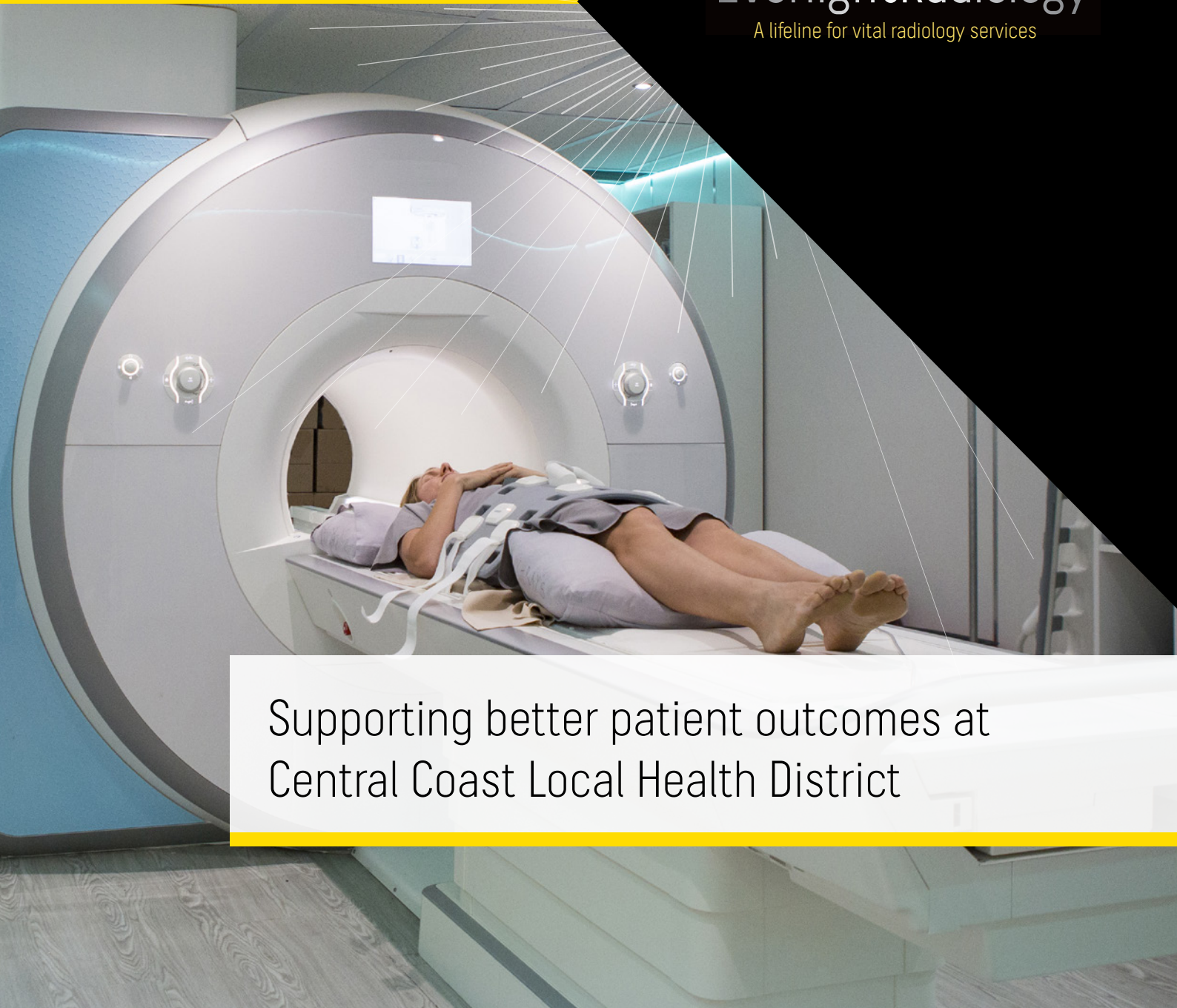


EverlightRadiology

A lifeline for vital radiology services

A photograph of a patient lying on a table inside an MRI scanner. The patient is wearing a grey blanket and is positioned horizontally within the large circular opening of the machine. The room is brightly lit with blue and white tones. The background shows the interior of the scanner with various panels and lights.

Supporting better patient outcomes at
Central Coast Local Health District



Executive Summary

Central Coast Local Health District (LHD) has worked with Everlight Radiology over the past five years to address issues of staff fatigue, ensure appropriate support during peak periods, and help in managing the backlog of unreported cases within the region's busy Radiology Department.

**> Central Coast LHD report
130,000 cases each year**

Introduction

Central Coast LHD is a densely populated NSW coastal region located just north of Sydney. The region is served by two acute hospitals at Gosford and Wyong, two sub-acute facilities and ten community health centres, as well as other community-based services. The District has one of the busiest emergency departments in the state. The region also has a higher than average older population (people aged over 70 years), and is currently experiencing a higher than average population growth.

Central Coast LHD provides radiology services 24 hours a day, seven days a week to a population of around 330,000 residents. The Radiology team reports 130,000 cases each year, with the volume of cases steadily increasing by 4.5% each year. This increase is due to the region's ageing population resulting in a significant number of stroke cases; sporting injuries due to its active population and proximity to the coast; and the LHD's location on Australia's busiest highway, which sees a high number of accident and emergency trauma cases.

Fatigue and backlog impacting patient outcomes

In 2012, Central Coast LHD was experiencing a backlog of 60,000 cases (per year), causing high levels of fatigue among consultant radiologists and registrars, and therefore putting patient health outcomes at significant risk. The Radiology team consisted of 18 radiologists (9.7 FTE) and 11 trainees. Like all busy hospitals, rostering was a persistent challenge and employing more radiologists was neither practical nor cost effective.

Impossible to predict demand

With the hospital located beside the busy Pacific Highway, and a rapidly ageing (and growing) population fueling demand, the Radiology Department was finding it increasingly difficult to predict demand and peak times. A significant increase in demand was also anticipated, with the completion of a new hospital at Gosford due to open in 2018 featuring a larger emergency department, which will inevitably increase radiology requests from more onsite clinicians.



> The emergency department at Gosford Hospital is one of the busiest in the state with more than 66,000 presentations each year.¹

¹ Bureau of Health Information 2017 (NSW)

Finding an innovative and cost effective solution

The LHD was operating in a highly unpredictable environment with the Radiology Department struggling to manage fluctuations in supply of qualified radiologists and demand for radiology services. Health budgets were not able to provide for the luxury of a high fixed cost for radiology services by simply recruiting more radiologists, causing high levels of fatigue among radiologists and registrars. The LHD was forced to consider innovative alternatives to address growing and unpredictable demand to ensure the health service could continue to provide the best patient care for residents and visitors to this busy coastal region, especially during peak times

Everlight helped contain the backlog of more than 60,000 unreported cases

Teleradiology was the inevitable solution for health executives, with a new Head of Radiology who had a positive experience using a teleradiology partner in other health districts. In developing the business case, the Radiology Department engaged key stakeholders within the hospital to ensure universal support and maintain open lines of communication. Ensuring the best patient outcomes was (and still is) positioned as the top priority in engaging a teleradiology service.

Following a competitive tender process, Everlight were engaged initially to address issues of fatigue among the Radiology team, supporting on-site radiologists through peak periods without the need to recruit more staff, and helping to contain the backlog of more than 60,000 unreported cases.

The benefits for radiologists, patients, clinicians and the hospital executive were immediate. Staff fatigue was completely mitigated, with registrars supported by Everlight's experienced radiologists out of hours, and on-site consultants able to start afresh each day without the endless backlog of cases requiring reports greeting them at the start of each shift.

The District's executives were also confident in the hospital's ability to address variable demands without having to recruit additional staff, with the teleradiology service able to be dialled up or down to address peak service needs, overflow and backlogs of cases as required.



> Central Coast Local Health District is located north of metropolitan Sydney and provides health care services across a geographic area of about 1680 square kilometres.

> The District's population is expected to increase by about 14 per cent, or more than 40,000 people, to about 374,000 people over the next 10 years.

> The District has a significantly older population, with residents aged 70 years and older projected to grow by about 35% to represent about 17.7% of the population.

> Central Coast residents have higher rates of death from all causes, in particular cancers and respiratory disease, than people in the rest of NSW.²

² NSW Health Annual Report 2016-17

Teleradiology an extension of the onsite team



Everlight is now considered an integral and essential part of the Radiology team at Central Coast LHD. Everlight's complementary, "follow the sun" model provides radiology services around the clock and directly supports the on-site radiology team, helping to mitigate staff fatigue, ensure appropriate support during peak periods, and assure patient safety 24 hours a day, seven days a week.

Central Coast LHD now uses teleradiology for all out of hours reporting, including weeknights Monday to Friday, weekends and public holidays. Weeknight caseload averages five cases per night, with an average of 30-40 cases sent to Everlight over the weekend. The LHD also uses Everlight for highly complex cases where the problem needs to be addressed as quickly as possible, and all acute abdomen cases.

Everlight's robust peer review process gives clinicians and hospital administrators the confidence that reports are of the highest quality and low in errors. Everlight consistently delivers on the one hour KPI for delivery of reports in emergency departments, consistently achieving a 97% compliance to turnaround time KPI, which is virtually impossible to achieve on-site due to the range of other radiology services the team provides (such as therapeutic radiology).

The backlog of unreported cases has been reduced to virtually zero and the LHD now sends some less urgent cases in bulk when experiencing overflow or backlog. This generally includes a bulk send of cases over the busy Christmas period to ensure the backlog is eliminated and staff can start afresh in the new year.

Central Coast LHD's strong and reliable relationship with Everlight has positioned it well to cope with the inevitable increase in demand for radiology services in years to come. Everlight's proven reliability, quality of service, and ability to deliver during periods of peak demand have given the District's Radiology Department the confidence that their team is well supported to deliver the highest quality radiology service to patients and clinicians and contribute to better patient outcomes for the region's residents and visitors.

97%

Everlight consistently delivers on the one hour KPI for delivery of reports in emergency departments, consistently achieving a 97% compliance to turnaround time KPI.

The background features a large black triangle on the left side that points towards the right. From the right vertex of this triangle, a series of thin, light yellow lines radiate outwards across the top half of the page. The top half of the page is a solid yellow color, while the bottom half is white.

EverlightRadiology

A lifeline for vital radiology services

The case for change starts now
For more information visit everlightradiology.com

Everlight Radiology
Level 11, 70 Phillip Street
Sydney, NSW 2000
T: **+61 2 9215 1900**