

2021 - CASE STUDY

# Telemedicine services for remote oil and gas operations.



## THE CHALLENGE

ExxonMobil Australia group is a subsidiary of ExxonMobil Corporation, one of the world's largest publicly traded international oil and gas companies.

Known around the world for fuel and lubricant brands that include Esso, Exxon, Mobil, and ExxonMobil Chemical, the group has been operating in Australia since 1895.

In the Bass Strait – the sea strait separating the Australian states of Victoria and Tasmania – ExxonMobil Australia operates 23 offshore platforms and installations, 14 of which are manned.

Up to 300 personnel are living and working offshore at any one time. These platforms operate 24 hours a day and crews typically work 12-hour shifts on a seven-days-on and seven-days-off roster.

Situated 20 kilometres from Sale in South Gippsland, Victoria, the Longford Gas Plant is ExxonMobil Australia's onshore receiving point for oil and gas output from Bass Strait.

## One of the biggest challenges in the oil and gas industry is how best to provide services, including medical services, to staff working on remote operations offshore.

All remote sites have highly competent first aid trained staff who liaise with the onshore clinical staff for additional support.

The company's workforce health services are managed by ExxonMobil Australia's Medicine and Occupational Health department. The department:

- Provides clinical services.
- Prevents and controls health risks (acute and long-term).
- Mitigates impacts of health issues on safety and operations.
- Identifies and evaluates health risks and provides controls and recommendations to protect workers.

### Health services provided include:

- Work-related injury and illness: optimal management on-site.
  - Personal health and return to work: fitness for duty evaluation/disability case management.
  - Medical surveillance: occupational exams, disease prevention, alcohol and drug testing.
  - Travel health and vaccinations: travel visits and exams, health education and prevention, vaccination programs.
  - Emergency preparedness and response: on-site medical response teams, medical evacuation, regional response support, global guidance, rapidly mobilise medical teams.
  - Health consulting: occupational health service design.
  - Wellness programs: promotes employee wellness.
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## THE SOLUTION

In mid-2020, telemedicine services were initially trialled on three offshore locations and at the Longford Gas Plant. In addition to existing computer systems at these locations, first aid rooms were kitted with a combined camera/speaker unit for the purpose of telemedicine consultations and a Visionflex [GEIS® General Examination Camera HD](#) to enable clinical examinations with diagnostic quality video and still images.

External consultants were used when initially setting up telemedicine for ExxonMobil Australia operations and GEIS® cameras were recommended for use.

Based on positive results, telemedicine services were extended to a further 11 offshore locations, with works completed over Q1/2021.

The company has now established telemedicine services between Melbourne, Longford Plant, and platforms in Bass Strait, with telemedicine services and GEIS® cameras available on all manned offshore platforms.

The GEIS® camera allows the Offshore First Aider to use the camera with automatic or manual focus for clear and crisp images, which augment video footage from a traditional web camera.

Additional GEIS® camera snap-on accessories that can be added to the existing setup include a tongue depressor attachment for images of the oral cavity, a dermatology hood for skin and eye assessments and a wound stick for wound management.

The Visionflex [GEIS® General Examination Camera HD](#) can be used in a wide range of clinical applications where clear, precise, and high-quality images are essential.



**Pictured:** (from left)  
GEIS® Camera with tongue depressor attachment; GEIS®  
Camera with dermatology hood attachment; GEIS® Camera  
with wound stick attachment;



## THE BENEFITS

ExxonMobil Australia Manager of Medicine and Occupational Health, Dr Marcus Hirschfield, said the Visionflex GEIS® General Examination HD camera has improved the company's telemedicine service delivery in remote locations.

The GEIS® camera is simple to use, mobile, manoeuvrable, and provides high-quality video and still images during a clinical examination, enhancing diagnostic outcomes.

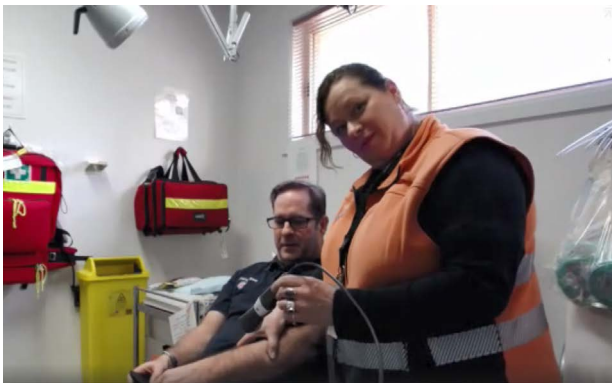
Dr Hirschfield said while the camera/speaker and Zoom meeting is valuable in providing guidance to those administering first aid and/or one-on-one consultations with workers in remote locations, the additional GEIS® camera provides a more detailed view during medical consultations. Examples might include a cut, abrasion, or skin rash.

Dr Hirschfield said there are also financial benefits from the use of telemedicine services in remote offshore operations "where it can be shown that potentially unnecessary onshore medical assessments, and even possibly medevacs, can be avoided".

Importantly, said Dr Hirschfield, telemedicine utilising the GEIS® camera is improving outcomes for patients and clinicians.



**Dr Marcus Hirschfield**  
Manager of Medicine and  
Occupational Health



A telemedicine consultation in progress at the Longford Occupational Health Centre. All photos courtesy of ExxonMobil Australia.

"The cameras have definitely improved our service delivery in remote locations by providing clearer visuals when needed during a medical examination," said Dr Hirschfield.

"The benefit in using telemedicine that utilises the GEIS® camera, is that it provides comfort and support to both the person providing first aid and the patient, by having the visuals and the feeling of a 'doctor/medic in the room' rather than relying on telephone discussions.

"The higher resolution close-up views afforded by the GEIS® cameras are very helpful to our clinicians."

Pictured: GEIS® General Examination Camera HD

## PRODUCT SPOTLIGHT

# GEIS®

## General Examination Camera HD



The Visionflex **GEIS® General Examination Camera HD** provides exceptional quality images and video in full HD 1080p resolution.

This multi-purpose examination camera was developed specifically for telehealth and remote applications to capture and display full HD video and images of a patient encounter. With its light weight, ergonomic design and five control buttons, the GEIS® is easy to use. It offers auto or manual focus, LED illumination control and image capture all in one small, single-hand-operated camera.

Snap-on accessories include a tongue depressor attachment for oral imaging, a wound stick for wound management, and a dermatology hood for skin assessments.

The camera is teleconferencing ready, and its 16:9 images can be viewed on the **Visionflex ProEX** or any PC/Mac through a standard USB2 interface.

The GEIS® Camera is IEC 60601 compliant, making it suitable for clinical medical assessments.

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Visionflex, a leader in telehealth technology, was formed in 2014 by two Australian engineers with the goal of making world-class healthcare accessible to everyone.

## Visionflex – delivering healthcare to everyone, everywhere.

[Learn more here](#)

For more information or to book a demonstration, please contact Visionflex at [sales@visionflex.com](mailto:sales@visionflex.com)

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