# Pharmacists Branching Out: Leading the Way in a Virtual World

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## BACKGROUND

The Victorian Virtual Emergency Department (VVED) enables patients to register online for assessment by emergency nurses and medical practitioners from their home, providing an alternative to Emergency Department presentations.

The Department of Health appointed VVED as an avenue for patients to obtain COVID-19 antiviral therapies to support community access to treatment and prevent hospitalisations. A specialised Early Treatment team comprising of pharmacists and clinicians was created to facilitate this roll out.

A pharmacist was best placed to co-lead the project design given the medication safety and Pharmaceutical Benefits Scheme (PBS) considerations required.

## OBJECTIVE

The objective of the Victorian VED Early Treatment (VVED-ET) service is to provide access to antiviral therapies to high-risk populations across the state.
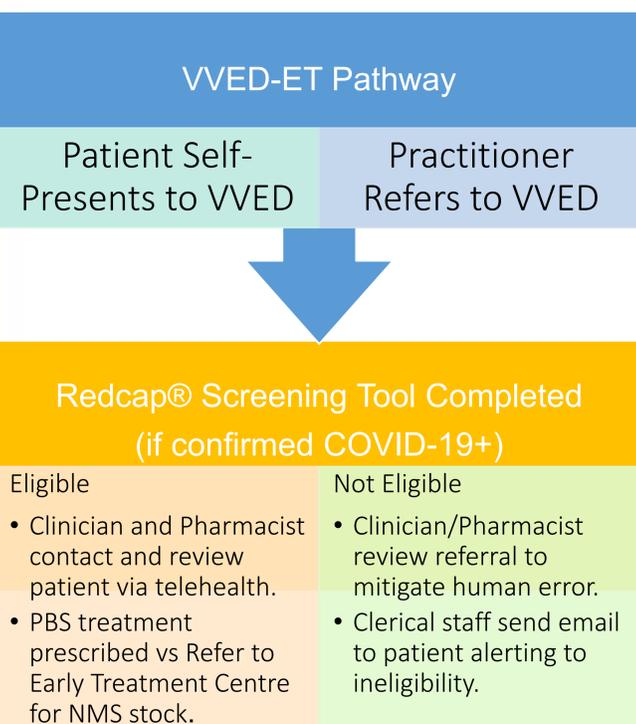
## METHOD

The VVED-ET Pharmacist identified high-risk populations , noting difference between PBS and National Medication Stockpile (NMS) criteria e.g.:
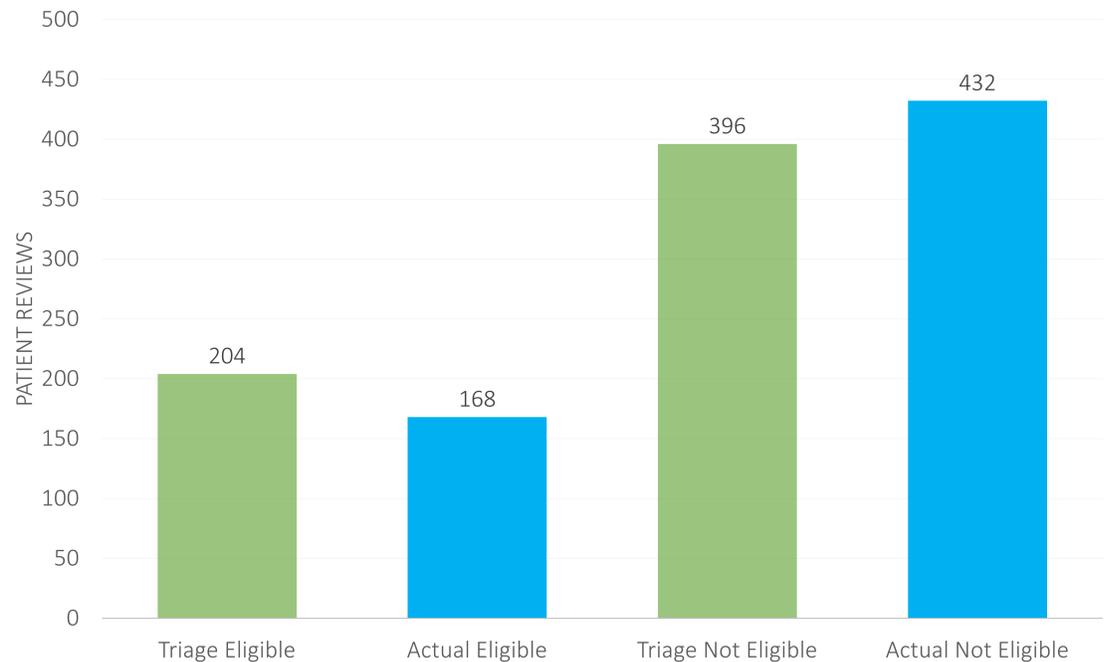
- Immunocompromised
- ≥70 years
- ≥50 + 2 high risk factors
- ≥ATSI + 2 high risk factors (now updated to 1 high risk factor)
- Selected pregnant and breastfeeding populations
- Selected paediatric populations
- Vaccination Status

PBS/NMS criteria change frequently, thus an effective triaging tool was required to facilitate timely clinical decision making when encountering large volumes of patients.

- The VVED-ET Pharmacist created an online screening/referral tool using RedCap® to ensure effective use of clinician resourcing.
- The tool uses branching logic, accounting for factors that affect antiviral eligibility and provides an auto-populated eligibility outcome. This serves as a direct referral to the VVED-ET team to complete a pharmacy/clinician review for appropriate therapy selection.
- Triage nurses complete the screening tool for all COVID-19 positive patients registering through VVED.
- Clerical staff assist in filtering the referrals for pharmacy/clinician review and ensuring communication to all non-eligible patients.

### VVED-ET Pathway

| Patient Self-Presents to VVED | Practitioner Refers to VVED |
| --- | --- |

### Redcap® Screening Tool Completed
(if confirmed COVID-19+)

| Eligible | Not Eligible |
| --- | --- |
| • Clinician and Pharmacist contact and review patient via telehealth.<br>• PBS treatment prescribed vs Refer to Early Treatment Centre for NMS stock. | • Clinician/Pharmacist review referral to mitigate human error.<br>• Clerical staff send email to patient alerting to ineligibility. |

## Eligibility: Triage vs Clinical Review



**Graph 1:** Comparison of Redcap Triage Eligibility vs Actual Eligibility upon Clinical Review

Triage Eligible: 204
Actual Eligible: 168
Triage Not Eligible: 396
Actual Not Eligible: 432

## VVED-ET Reviews vs COVID-19 Cases Victoria
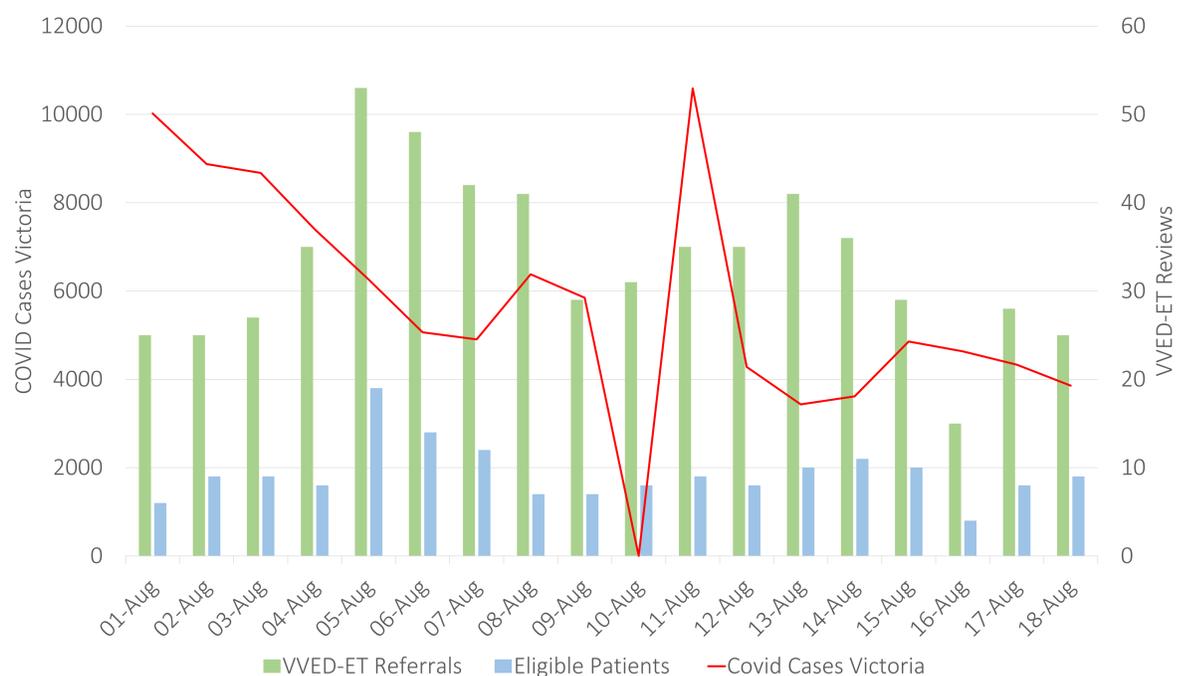


**Graph 2:** Depiction of VVED-ET impact on Overall COVID-19 cases Victoria

Legend: VVED-ET Referrals — Eligible Patients — Covid Cases Victoria

## EVALUATION

To evaluate the implementation of the triage tool, the VVED-ET pharmacist conducts weekly reports of referral accuracy comparing preliminary eligibility to patient outcome.

Since launch, 600 patients have been captured using the pharmacy screening tool with a preliminary eligibility of 34%. Patients that were deemed to require treatment following clinician review stand at 28%. The difference between preliminary versus actual eligibility can be attributed to human error and changes to NMS criteria.

The evaluation process allows for identification of common trends of human error which then enables directed education to triage nursing staff.

Ongoing evaluation also helps to capture and compare the number of VVED-ET referrals vs State-Wide COVID-19 cases, allowing depiction of real-time impact.

All patients referred to the VVED-ET service are reviewed within a 24 hour period allowing timely access to early treatment.

## DISCUSSION

The pharmacy screening tool has successfully captured patients considered high-risk of hospitalisation due to COVID-19 and supported timely access to antiviral treatments.

Although efficient, there are risks expected with using an electronic triaging system to filter patient referrals. Frequent changes to NMS and PBS criteria are identified as an ongoing risk. The RedCap® tool branching logic needs to be manually updated every time there is an alteration. If there is a delay in this update, there is a potential for patients to be missed due to outdated coding.

To account for this, a designated clinician/pharmacist is required to review all non-eligible patients to ensure against the risk of missed patient reviews. This also minimizes the risk of missed patient reviews due to human error during triage.

As this service grows, the VVED-ET pharmacist is continuously looking for new ways to improve efficacy and patient outcomes. Next step is to create an automated SMS/email to be directed to the patient after their triage to provide realistic expectations of when the VVED-ET team will attend to their review.

Operational application of clinical knowledge and PBS expertise in the VVED puts pharmacists in a prime position to develop further screening tools to improve use of clinical resources and support large scale access to therapies.

TIME IS BRAIN | TIME IS MUSCLE | TIME IS

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