

Reducing diagnosis to treatment time for acute angle closure glaucoma

Tyson Kin-Chung Chan¹, Wei Lin Gan¹, Daryl Goei Ying Hao¹, Lee Soo Cheow¹, Siti Muzalifa Binte Mohamed Salleh¹, Sarah Tan Huei Zhen², Lim Yu Cai², Jason Cheng¹

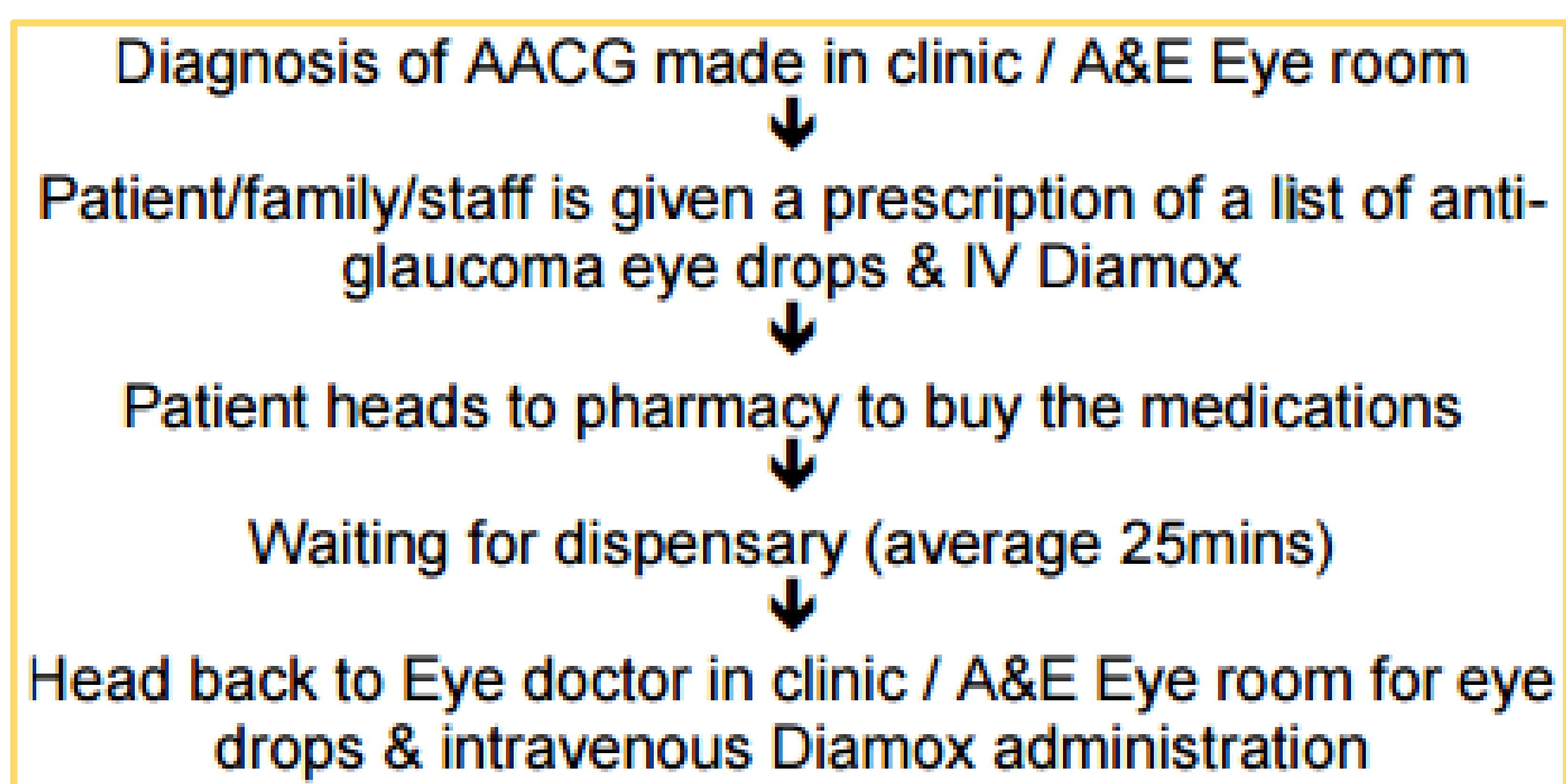
¹Ophthalmology & Visual Science Department ²Pharmacy Department

Background

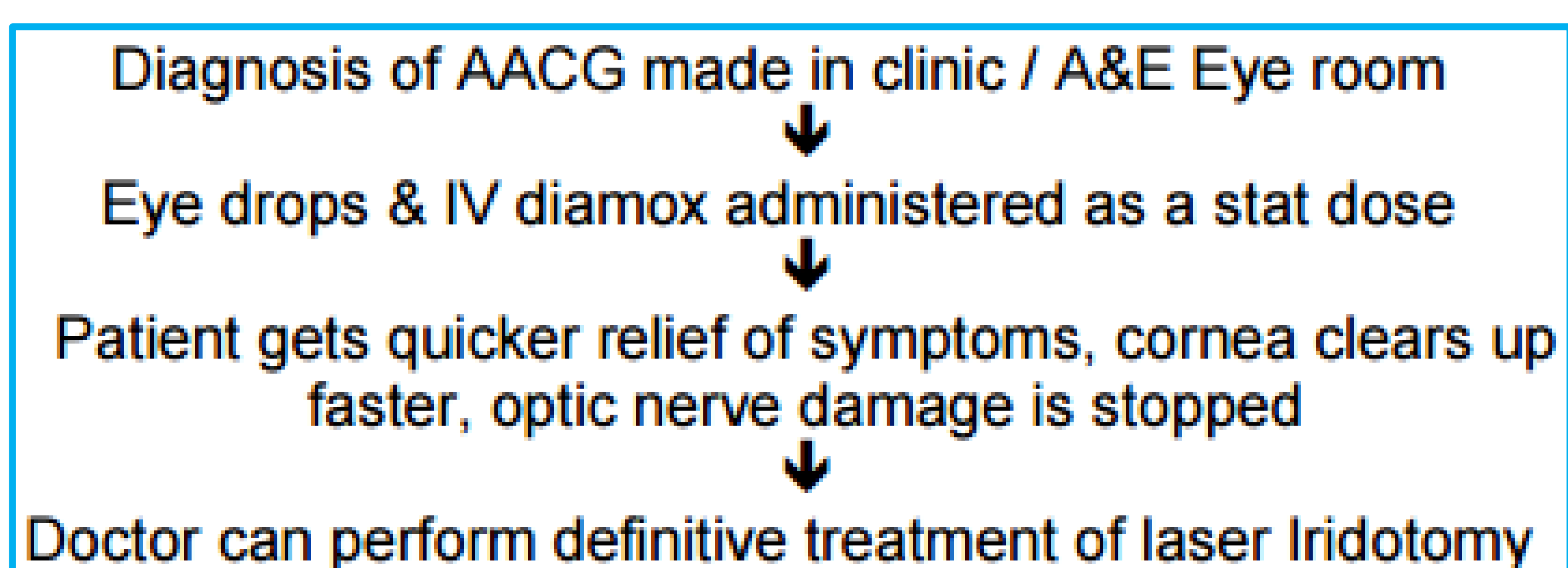
- **Acute angle closure glaucoma (AACG)** is an ocular emergency that can lead to blindness if not treated quickly.
- **Eye pressure** is the only modifiable risk factor.
- The **earlier the treatment** to lower the eye pressure, the **less damage** occurs to the eye.

Methodology

- Change the current workflow:



- To the new workflow:



- Acute glaucoma kit contains medications needed:



Results

- Reduced time taken from diagnosis of AACG to treatment.
- Time taken from diagnosis to administration of treatment was measured in 2 recent cases of angle closure glaucoma:

Diagnosis to treatment time

Without the kit: 25 minutes

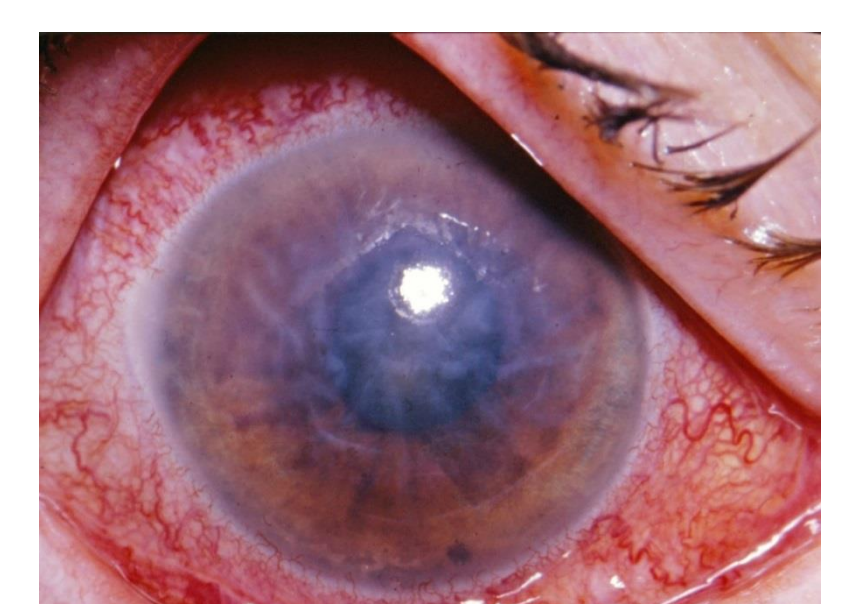
With the kit: 12 minutes

- Eye pain and pressure was controlled earlier, reducing the amount of irreversible damage to the eye.
- Patients/family/staff did not need to travel to and from pharmacy while in pain and with blurred vision or a member of the clinic staff did not need to be taken away from clinic duties to the pharmacy to wait for a stat dose order.
- Pharmacy did not need to rush an urgent stat medication order therefore reduced pharmacy workload.
- Drops were shared between patients, reducing wastage.

Normal eye



AACG



Conclusion

- Benefits provided to:

1. Patient

- Reduced diagnosis to treatment time
- Alleviated patient's symptoms earlier
- Increased chances of visual recovery

2. Pharmacy

- Lowered workload for pharmacy department
- No need for STAT orders

3. Ophthalmology & Visual Sciences Department

- Reduced time spent ordering and acquiring medication