

Enhancement of Sleep Laboratory service : Set Up Home Sleep Service in Princess Margaret Hospital



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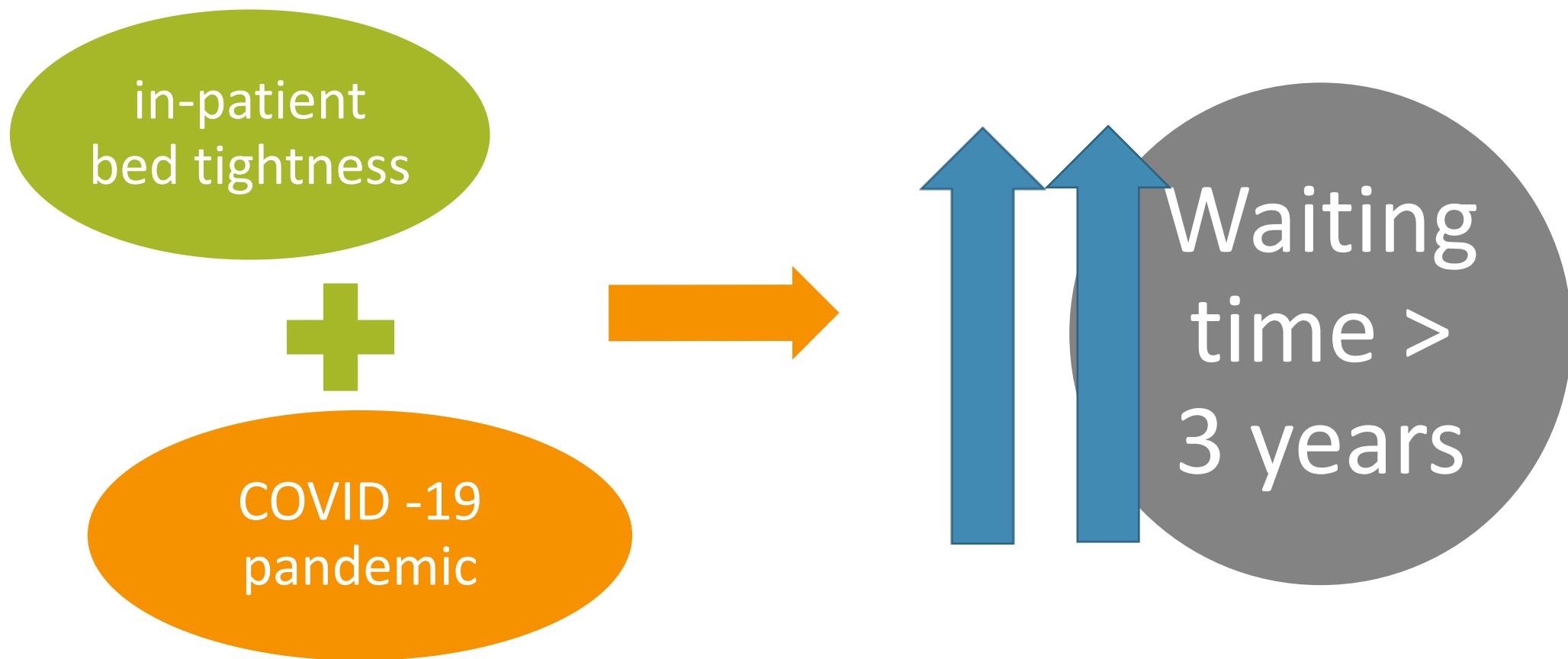
Background

- Obstructive sleep apnoea (OSA) is a breathing disorder known by recurring episodes of upper airway obstruction
- In Hong Kong, the prevalence of OSA is over 4% in male and over 2% in female (age from 30 to 60 years)

Background

- Polysomnography (PSG) is the gold standard for diagnosing obstructive sleep apnea (OSA) in patients
- Since 2000 , in- patient sleep study has provided in respiratory unit of PMH

Background



Home sleep apneas test (HSAT)

- A simplified version of sleep study (level 3 sleep study) to conduct testing for OSA at home.
- In 2024, home sleep service was set up in the respiratory unit.

Objective

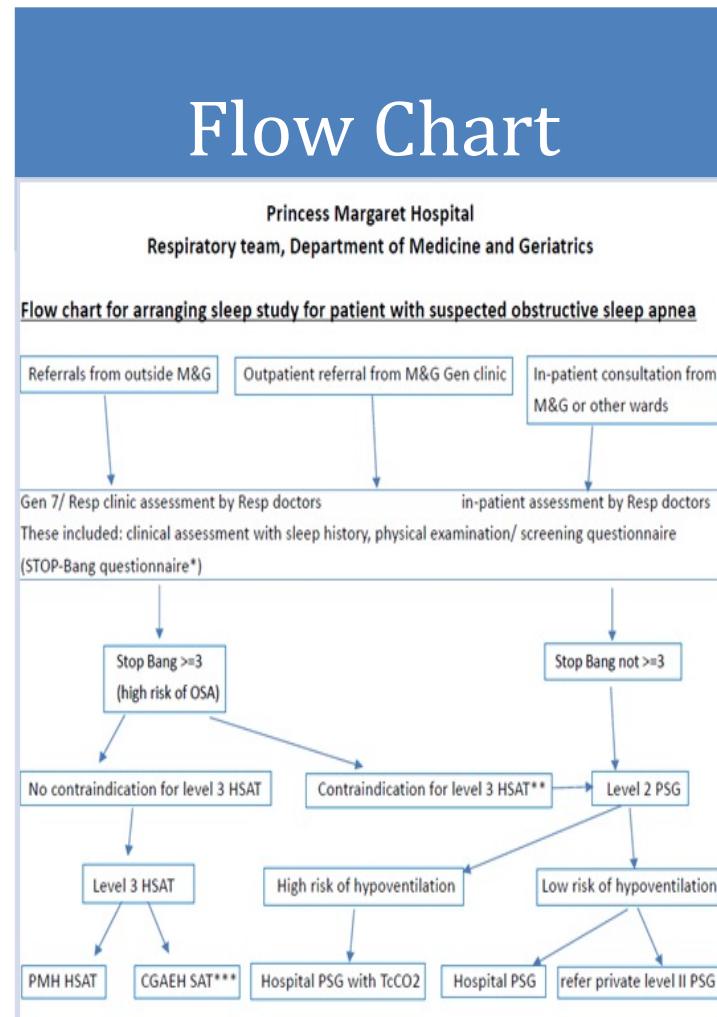
- To reduce the waiting time of sleep study for OSA by using home sleep services
- To improve the effectiveness of home sleep service with initiative intervention.

Methodology

1. Service workflow

Home Sleep study schedule

- 2 home sleep study /week
- Total 10 home sleep study / month

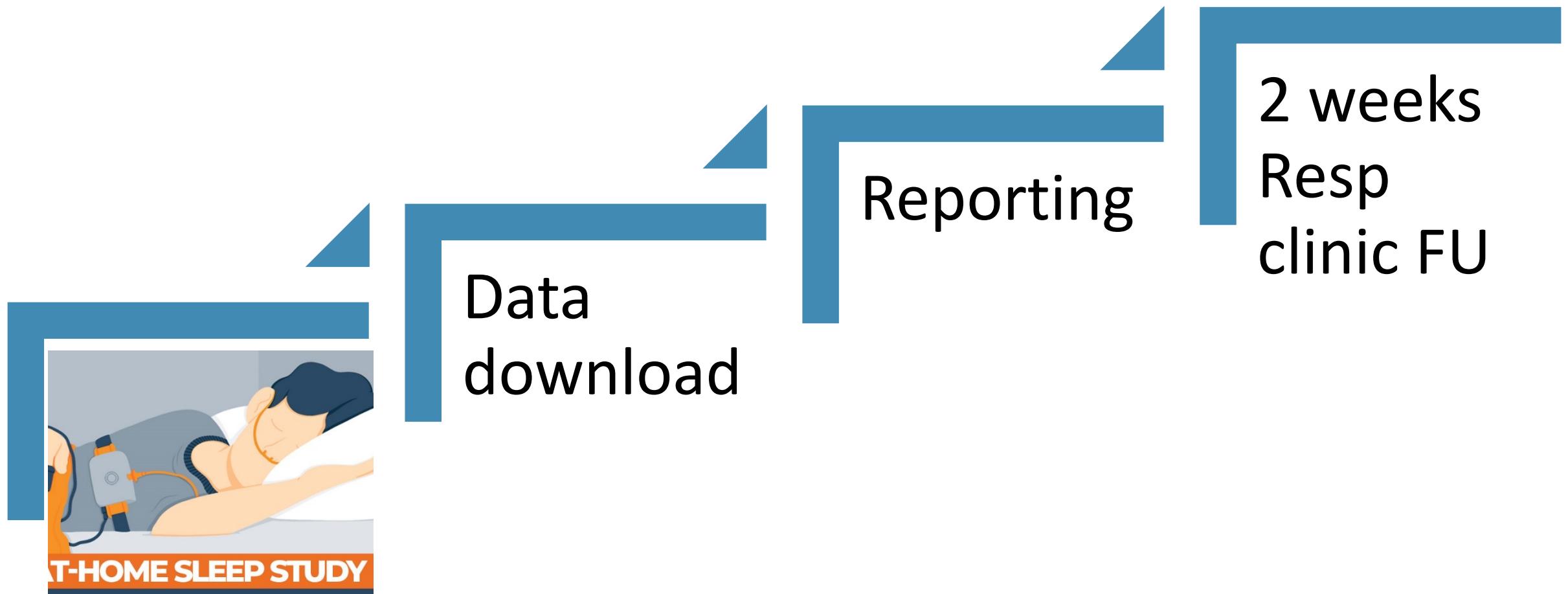


Stop Bang Questionnaire

STOP BANG Questionnaire
yes=1; no=0

| | |
|----------------|---|
| S | Snoring |
| T | Tiredness |
| O | Observed apnea |
| P | High blood pressure |
| B | BMI $> 35\text{kg/m}^2$ |
| A | Age > 50 years |
| N | Neck circumference > 40 cm (measured around Adams apple) |
| G | Male Gender |
| Scoring | 0-2 Low risk |
| | 3-4 Intermediate risk |
| | 5-8 High Risk |

Home sleep report



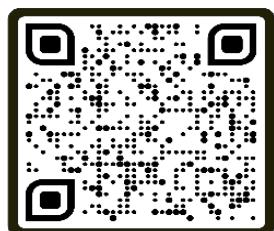
Methodology

2. Patient education / educational materials

● Individual training (Half hour)

● Educational materials

● Evaluation



Home Sleep Study

瑪嘉烈醫院呼吸科

家居睡眠測試指引

家居睡眠測試是利用放置在鼻孔、胸部、腹部的感應器和手指上的血氧測試儀，收集分析數據製作成睡眠報告，協助醫生得知測試者有否出現缺氧和窒息的情況，從而診斷測試者有否患上睡眠窒息症。瑪嘉烈醫院呼吸科會外借家居睡眠測試儀器一套，使測試者可根據醫護人員指示在家中自行配戴儀器進行測試。

注意事項:

1. 如需要定時服藥，請按照醫生指示服用。
2. 測試當日請勿飲用含酒精飲品及使用鎮靜劑。(如屬醫生處方每日必須的藥物，則可照常服用。)
3. 測試當日下午四時後請勿飲用咖啡或含咖啡因之飲品。(如屬每日習慣則例外)
4. 測試當日請勿睡午覺，以免影響測試結果。(如屬每日習慣則例外)
5. 當日應儘量保持平日活動及生活狀態，切勿刻意增加或減少運動及食量。
6. 使用儀器時請勿塗上指甲油。
7. 佩戴儀器後，避免弄濕及損壞儀器；亦要避免大幅度的肢體動作，以免令儀器及配件鬆脫。
8. 此測試儀器及配件乃醫管局財物，請小心保護。如有損壞或遺失，醫管局保留追究責任的權利。
9. 八號颱風或黑色暴雨警報訊號發出後，本部門將停止服務。所有約期將會通過電話更改。如有查詢請於辦公時間致電 29901636。
10. 辦公室地址: 瑪嘉烈醫院 P 座 1 樓呼吸機組。



瑪嘉烈醫院呼吸科

家居睡眠測試問卷調查

以下是一個針對病人家居睡眠測試操作的問卷調查。這份問卷旨在收集病人在進行家居睡眠測試過程中的經驗和感受。

年齡:

18-30 31-40 41-50 51-60 >60

性別:

男 女

你是職業司機:

是 否

1. 您對測試設備的指引清楚瞭解:

非常同意 不同意 同意 非常不同意

2. 您在家中進行睡眠測試時沒有感到不適:

非常同意 不同意 同意 非常不同意

3. 家居睡眠測試 短片教學, 教導 疮張和護士講解 內容清晰易懂:

非常同意 不同意 同意 非常不同意

4. 透過短片教學和單張，能協助你在家進行睡眠測試:

非常同意 不同意 同意 非常不同意

5. 家居睡眠測試安排比較方便:

非常同意 不同意 同意 非常不同意

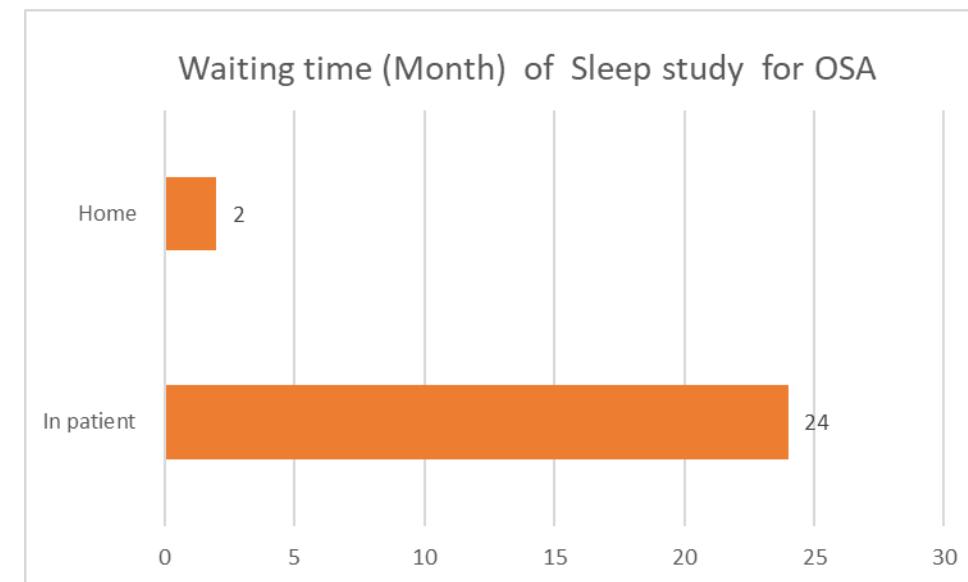
6. 您對家居睡眠測試整體過程感到滿意:

非常同意 不同意 同意 非常不同意

7. 您對家居睡眠測試有什麼建議或意見?

Result and Outcome

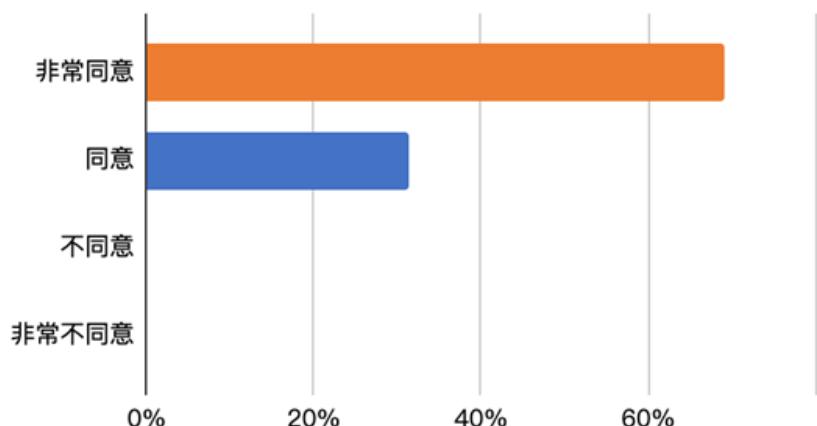
- Period : Apr – Dec 2024
- Nos. of home sleep study : 34 cases
- Result : 88.2% cases with OSA / 11.8% cases without OSA
- Waiting Time : 2 months



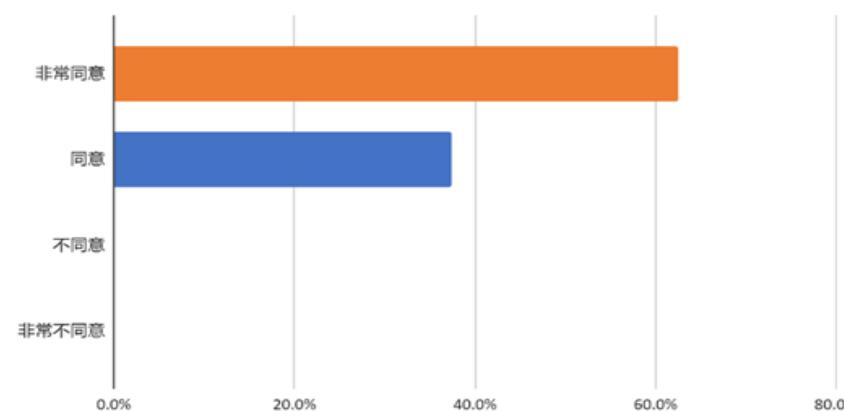
Result and Outcome

- Home sleep study
 - 69% of patients totally agreed that the home sleep study is more comfortable, as patients sleep well in their home sleep environment
 - 62.5% of patients totally agreed that the home sleep study is more accessible.

2. 您在家中進行睡眠測試時沒有感到不適



5. 家居睡眠測試安排比較方便

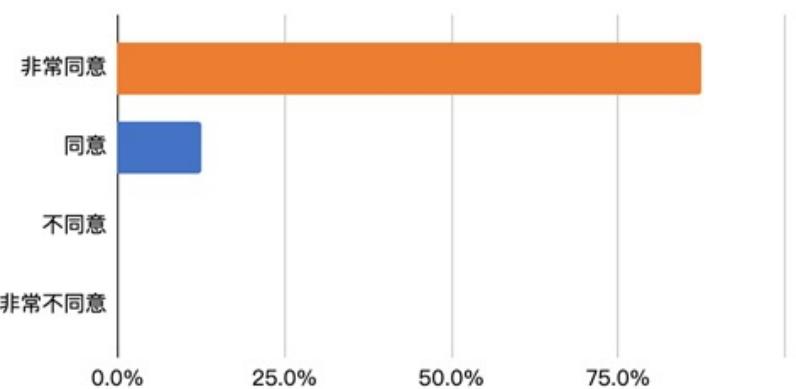


Result and Outcome

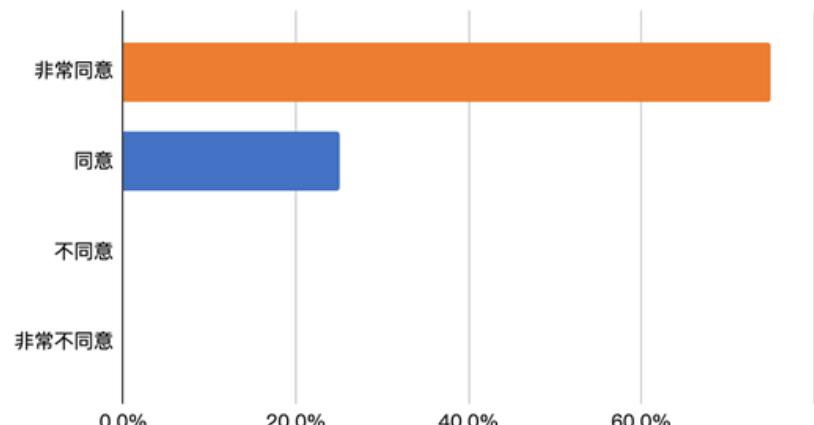
- Nursing Education / Material

- 87.5% of patients totally agreed that the educational materials provided were clear and comprehensible
- 75% found the accompanying video guides and leaflets useful in facilitating their understanding of the home sleep study process.

3. 家居睡眠測試 短片教學, 教導 單張和護士講解
內容清晰易懂



4. 透過短片教學和單張，能協助你在家居進行睡眠測試



Conclusion

Home sleep study

- Less expensive
- Less staff
- cost-effective and efficient
- Early diagnosis

Acknowledge

Dr. Y C Yeung (Consultant /Resp/ PMH)

Ms. Jessica Yik (DOM/ M&G/PMH)

Ms. Ruth Lau (NC / Resp/PMH)

Respiratory Day Service Team



thank
you