**eTable and eFigure legends**

**eFigure 1:** Cumulative incidence of detection of symptomatic significant arrhythmias in those patients unexplained after ED evaluation in ambulatory patch and historical unmatched comparator groups

**eTable 1:** Summary of patient satisfaction questionnaire results

**eTable 2:** Ambulatory patch results (returned patches only)

**eTable 3:** Suggested clinical management before and after reviewing ambulatory patch results

**eTable 4:** Suggested investigations before and after reviewing ambulatory patch results

**Appendix 1:** PATCH-ED Patient Satisfaction Questionnaire

**eTable 1:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Strongly agree | Agree | Neutral | Disagree | Strongly disagree | No response received |
| The patch monitor was easy to use | 24 | 19 | 3 | 0 | 1 | 39 |
| The patch monitor was comfortable to wear | 13 | 21 | 8 | 2 | 3 | 39 |
| I was able to go about my normal activities | 19 | 20 | 1 | 3 | 3 | 40 |
| I was aware of the patch monitor | 7 | 18 | 14 | 2 | 5 | 40 |
| The patch monitor will be useful in diagnosing the cause of my blackout | 7 | 18 | 12 | 1 | 4 | 44 |
| If I needed a heart monitor in the future, I would wear this patch monitor | 15 | 23 | 5 | 1 | 3 | 39 |
| Had you ever worn a heart monitor before? | Yes = 7, No = 35 | | | | | 41 |

**eTable 2:**

|  |  |
| --- | --- |
|  | **n=76** |
| **Wear Time (Days)** | **13.6 (11.8 - 14.0)** |
| **Analyzable Time (Days)** | **13.2 (11.0 - 13.8)** |
| Number of triggered events | 2 (0-6) \* |
| Number of diary entries | 0 (0-0) \* |
| **Patients with diagnostic findings within +/- 45 seconds of triggered or diary events** | **56** |
| AV block | 1 |
| Supraventricular tachycardia | 2 |
| Atrial Fibrillation | 4 |
| Pause | 3 |
| Sinus Rhythm/ectopic beats only | 46 |
| Atrial fibrillation detected | 7 |
| Ventricular tachycardia detected | 17 |
| Supraventricular tachycardia detected | 43 |
| Ventricular fibrillation detected | 0 |
| Pause(s) detected | 6 |
| Atrioventricular block detected | 2 |
| Supraventricular ectopics(s) detected | 70 |
| Ventricular ectopics(s) detected | 72 |

Values are presented as median (IQR) or n unless stated

**eTable 3:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Actual follow-up in place (n=76) | Follow-up suggested by independent | | | |
| Expert 1 (n=76) | | Expert 2 (n=73) | |
| Before  receiving patch report | After  receiving patch report | Before  receiving patch report | After  receiving patch report |
| None | 0  **(0%)** | 5  **(7%)** | 3  **(4%)** | 20  **(27%)** | 19  **(26%)** |
| GP follow-up | 47  **(62%)** | 5  **(7%)** | 3  **(4%)** | 6  **(8%)** | 5  **(7%)** |
| EPS outpatient clinic review - routine? | 0  **(0%)** | 2  **(3%)** | 8  **(11%)** | 2  **(3%)** | 2  **(3%)** |
| EPS outpatient clinic review - urgent? | 0  **(0%)** | 3  **(4%)** | 7  **(9%)** | 0  **(0%)** | 3  **(4%)** |
| Outpatient medical review | 18  **(24%)** | 27  **(36%)** | 23  **(30%)** | 22  **(30%)** | 17  **(23%)** |
| Outpatient non EPS cardiology review | 11  **(14%)** | 16  **(21%)** | 12  **(16%)** | 19  **(26%)** | 22  **(30%)** |
| Immediate admission through ED/cardiology | 0  **(0%)** | 18  **(13%)** | 20  **(26%)** | 4  **(5%)** | 5  **(7%)** |
| No change | | 57 **(75%)** | | 52 **(71%)** | |
| Escalation of follow-up care | | 17 **(22%)** | | 15 **(21%)** | |
| De-escalation of follow-up care | | 2 **(3%)** | | 6 **(8%)** | |

**eTable 4:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Investigations suggested by independent | | | |
| Expert 1 (n=76) | | Expert 2 (n=73) | |
| Before  receiving patch report | After  receiving patch report | Before  receiving patch report | After  receiving patch report |
| None | 7 **(11%)** | 22 **(29%)** | 10 **(14%)** | 56 **(77%)** |
| Echo as inpatient | 12 **(16%)** | 14 **(18%)** | 0 **(0%)** | 0 **(0%)** |
| Echo as outpatient | 21 **(28%)** | 37 **(49%)** | 11 **(15%)** | 13 **(18%)** |
| Standard ambulatory ECG monitoring (outpatient) | 64 **(84%)** | 1 **(1%)** | 59 **(81%)** | 6 **(8%)** |
| Treadmill | 0 **(0%)** | 0 **(0%)** | 1 **(1%)** | 0 **(0%)** |
| Change in standard ambulatory ECG monitoring (outpatient) | -63 **(-83%)** | | -53 **(-73%)** | |
| Change in echo as inpatient | +2 **(+3%)** | | 0 | |
| Change in echo as outpatient | +16 **(+21%)** | | +2 **(+3%)** | |
| Change in those requiring no subsequent cardiac investigations | +15 **(+20%)** | | +46 **(+63%)** | |

Some patients had more than one investigation suggested

**Appendix 1:** PATCH-ED Patient Satisfaction Questionnaire

