Abstract 12 Table 2 Clinical outcomes and mortality

	Incidental dissection (n=18)	Incidental aortic aneurysm (n=24)	Other patients (n=586)
Success of valve deployment	16 (88.9)	21 (87.5)	569 (97.1)
New Aortic dissection	0 (0)	0 (0)	1 (0.2)
Vascular injury leading to death/limb amputation	0 (0)	0 (0)	1 (0.2)
Unplanned endovascular/surgical intervention	0 (0)	0 (0)	27 (4.6)
Stroke	0 (0)	1 (4.2)	17 (2.9)
Major bleeding requiring transfusion	1 (5.6)	0 (0)	10 (1.7)
Mean length of stay in hospital (days)	9.7 ± 13	5.7 ± 6.6	8.2 ± 13.3
30 day mortality	4 (22.2)	0 (0)	33 (5.6)
1 year mortality	6 (33.3)	6 (25)	81 (13.8)

Values are presented as mean ± standard deviation or N (%)

Kaplan-Meier analysis of 24 month MACE-free survival

Abstract 12 Figure 1 Kaplan-Meier survival curve

success rate of valve implantation (88.9% and 87.5% vs 97.1%, $p=0.01$). 30-day mortality in the dissection group was higher than the other 2 groups (21.1% vs 0% and 5.6%, $p=0.004$). Log-rank analysis revealed a higher incidence of MACE in the dissection group over 24 months compared to the other two groups (figure 1).

Conclusion A transfemoral approach appears to be a safe choice in patients with incidental findings of aortic dissection or aortic aneurysms >4cm. However, patients with stable previous aortic dissections have a significantly higher 30-day mortality and overall lower survival rate over 24 months. This important observation needs to be further investigated in a

larger-scale, long-term follow up study, and may in future influence TAVI treatment planning.

Conflict of Interest None

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CLINICAL INFORMATICS TO DIRECT COMMUNITY ECHOCARDIOGRAPHY: AN ELECTRONIC HEALTHCARE RECORD PILOT

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Background Delayed diagnosis of valvular heart disease carries a poor prognosis, and early identification is desirable. We undertook a retrospective analysis of echocardiographic and electronic health care record data from the largest single cardiovascular service in the UK, to identify the burden of acute presentations with previously undiagnosed valvular heart disease and to determine the geographical and demographic distribution.

Methods and Results Automated text mining analysis was retrospectively applied to all echocardiographic examinations performed between 2015 and 2019 at Bart's Health NHS trust, identifying 2043 reports containing text or numerical data indicating severe valvular lesions. Demographic and clinical data was integrated with the echocardiographic dataset,

Abstract 13 Figure 1

Abstract 13 Figure 2

identifying the postcode and GP practices for with the highest proportion of patients with severe valvular disease that were diagnosed during acute inpatient admissions. 376 individuals had severe valvular lesions identified during acute admission, of which 269 (72%) had no previously documented echocardiogram. A cluster of 11 GP practices (9%, 11 of 117 practices) were identified as having a higher proportion of diagnoses of severe valvular disease on acute admissions [figure 1]. These 11 were plotted geographically, alongside correlating postcodes, to identify geographical hotspots [figure 2]. Analyses were undertaken using Matlab, R and ggplot2.

Conclusions A geographical cluster of GP practices, centred around a single hospital, had a higher proportion of patients diagnosed with severe valvular disease during acute admissions without a previous echocardiogram. Outreach echocardiography provision in these regions could potentially identify patients with valvular disease before acute decompensation. Further work should focus on improving methodology to identify cases and investigating risk factors that predispose to diagnosis of severe valvular disease in extremis.

Conflict of Interest none

14 TIME TO TAVI: STREAMLINING THE OUTPATIENT PATHWAY TO TREATMENT

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Introduction Transcatheter Aortic Valve Implantation (TAVI) is an established treatment option for severe aortic stenosis (AS), with over 5000 procedures performed in the UK in 2019. Given the high morbidity and mortality associated with delay to treatment, the British Cardiovascular Intervention Society proposes a diagnosis to procedure window of 18 weeks. However, in the UK TAVI Survey (2019), over 50% of centres reported difficulty in increasing capacity to meet this demand and the average timescale to TAVI was far longer than this target at 155 days. Streamlining patients to a dedicated

structural clinic, a model proposed by Valve for Life UK, is therefore desirable to achieving these targets.

Methods To improve the timeline to TAVI at a district general hospital (DGH), we optimised the referral process in 3 key areas. Firstly, direct triage to TAVI clinic by physiologists at the time of echo diagnosis, negating the need for initial assessment by a general cardiologist. We utilised specialist CT analysis software (3-Mensia), allowed CT images to be analysed locally rather than during MDT meetings, increasing capacity to discuss more cases in the time saved. Lastly, the procedure was often completed by the same structural interventionist that had initially assessed the patient, eliminating the need for further clinic review in a specialist centre and providing continuity of care. We compared 2 pathways of patient care: pathway 1, representing existing processes, and pathway 2, representing this novel way of working. Data was collected retrospectively over a 2-year period (pathway 1 duration 16 months, pathway 2 duration 7 months) for all patients with severe aortic stenosis who were intended for TAVI procedure. We considered death whilst waiting for procedure or admission with progressive AS symptoms as adverse events.

Results A total of 65 cases were reviewed, 44 were managed as outpatients and 15 inpatients. We excluded 5 cases treated

Abstract 14 Figure 1