followed did not progress to AIDS until 108 months. Independent prognostic factors for AIDS-free-time were: treatment with ART without HAART (HR 2.1; 95% CI 1.6 to 2.8), no treatment regimen (HR 3.0; 95% CI 2.5 to 3.6); age at HIV infection diagnosis between 30 and 49 years (HR 1.2; 95% CI 1.1 to 1.3), age over 50 years (HR 2.9; 95% CI 2.3 to 5.2); black race/colour (HR 1.4; 95% CI 1.1 to 1.7); MSM (HR 1.4; 95% CI 1.1 to 1.6) and IDU (HR 1.7; 95% CI 1.5 to 2.2) exposure categories; up to 8 years of schooling (HR 1.3; 95% CI 1.1 to 1.5) and no schooling (HR 2.0; 95% CI 1.4 to 5.6); and CD4 count between 550 and 500 cells/mm$^3$ (HR 1.6; 95% CI 1.3 to 1.9).

Conclusions Increased AIDS-free-time was observed, with HAART. Decrease in the incidence rates were observed, Predictor factors to AIDS were treatment, age, race/colour, transmission categories, schooling and CD4 count.

**SP3-46** AIDS SURVIVAL IN THE PRE AND POST-HAART ERAS IN THE SAO PAULO AIDS COHORT, BRAZIL

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Background AIDS remains a great public health problem and the effect of ART has been studied. The objectives were to estimate AIDS mortality rates, median survival time and to investigate death predictor factors.

Methods Retrospective cohort study, with 6594 adult patients followed from 1988 to 2005. The Kaplan–Meier estimator, the Cox proportional hazard model and HRs estimates were used.

Results In a follow-up of 203 008 persons-year, 2936 patients progressed to death. AIDS mortality rates were 17.6, 23.2, and 7.8 person-years in the 1988–1993, 1994–1996 and 1997–2005 periods, respectively. Median progression time from AIDS to death was 13.4 months in the 1988–1993 period; 22.3 months, between 1994 and 1996, and in the 1997–2005 period, over 50% of patients followed survived. Independent predictor factors for death were: AIDS diagnosis period 1994–1996 (HR 2.0; 95% CI 1.8 to 2.2) and 1988–1995 (HR 3.2; 95% CI 2.8 to 3.5); AIDS diagnosis age between 30 and 49 years (HR 1.4; 95% CI 1.2 to 1.5), age over 50 (HR 2.0; 95% CI 1.7 to 2.3); MSM (HR 1.1; 95% CI 1.0 to 1.2) and IDU (HR 1.5; 95% CI 1.3 to 1.6) exposure categories; up to 8 years of schooling (HR 1.4; 95% CI 1.3 to 1.5) and no schooling (HR 2.1; 95% CI 1.6 to 2.8); and CD4 count between 550 and 500 cells/mm$^3$ (HR 1.2; 95% CI 1.1 to 1.2) and <350 cells/mm$^3$ (HR 1.3; 95% CI 1.2 to 1.5).

Conclusions Increase in AIDS survival and decrease in the mortality rates were observed with HAART. Predictor factors to death were AIDS diagnosis period, age, transmission categories, schooling and CD4 count. The results show the great positive impact of the Brazilian National AIDS Program.

**Methods** The authors used multivariable negative binomial regression in a large, population-representative birth cohort to examine the adjusted associations of proximity to hospitals with Accidents and Emergency services, proxied by distance to the nearest such hospital, with hospital admissions, bed-days and average length of stay from 8 days to 8 years of age.

**Results** Physical proximity was positively associated with emergency admissions in children (incidence rate ratio (IRR) 1.25, 95% CI 1.1 to 1.35 for <1 km compared to ≥2 km) and bed-days but not with average length of stay, adjusted for age, sex and socio-economic position. However, in a similar comparison there was no such association for other (ie, planned) admissions (IRR 1.04, 95% CI 0.85 to 1.27).

**Conclusion** Proximity was associated with hospital use for emergency admissions. Given the societal costs of such use and the risks of iatrogenesis, attention should focus on achieving a more effective use of scarce resources.

**SP3-48** ROUTINE MORTALITY AND CAUSE OF DEATH REPORTING AND ANALYSIS SYSTEMS IN SEVEN PACIFIC ISLAND COUNTRIES

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Introduction Statistics on mortality levels and causes of death are essential for health planning. However, at the end of 2003, only 7 of 27 countries in the Western Pacific Region had data available on causes of death. Routine death reporting systems across seven Pacific Island Countries; Fiji, Kiribati, Nauru, Palau, Solomon Islands, Tonga and Vanuatu, are examined. Strengths and limitations common across national systems are identified, and system characteristics related to data availability and quality.

Methods System assessments included key informant interviews, observation of processes, and document review. Findings were grouped according to a framework that classifies system characteristics according to societal issues, the national administrative environment, administration, technical and ownership issues.

Results Routine reporting of deaths is predominantly managed through civil registration systems or within Health departments. Health reporting systems are critical in supporting the civil registration process. Significantly more information is available than currently used. Legislation on death reporting exists for all islands, but does not necessarily reflect current practices. Significant duplication of data collection and entry exists across all systems. The close interaction between health staff and local communities could provide a good foundation for further improvement in death reporting in these countries. Responsibility, authority and ownership were central to the sustainability of the reporting systems.

Conclusion For Pacific Island Countries to effectively address health challenges there is no substitute for routine mortality and cause of death data collections. Suitable systems exist, but need to be strengthened to improve the completeness and quality of the data available.

**Methods** The authors used multivariable negative binomial regression in a large, population-representative birth cohort to examine the adjusted associations of proximity to hospitals with Accidents and Emergency services, proxied by distance to the nearest such hospital, with hospital admissions, bed-days and average length of stay from 8 days to 8 years of age.

**Results** Physical proximity was positively associated with emergency admissions in children (incidence rate ratio (IRR) 1.25, 95% CI 1.1 to 1.35 for <1 km compared to ≥2 km) and bed-days but not with average length of stay, adjusted for age, sex and socio-economic position. However, in a similar comparison there was no such association for other (ie, planned) admissions (IRR 1.04, 95% CI 0.85 to 1.27).

**Conclusion** Proximity was associated with hospital use for emergency admissions. Given the societal costs of such use and the risks of iatrogenesis, attention should focus on achieving a more effective use of scarce resources.

**SP3-49** THE RELATIONSHIP OF CLASS CLOSURE LENGTH AND THE CHANGE OF ABSENTEES AT ELEMENTARY SCHOOLS IN THE 2009 A/H1N1 INFLUENZA EXPANSION IN JAPAN: THE ANALYSIS IN T CITY, IBARAKI PREFECTURE

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Introduction Physical distance is a barrier to hospital utilisation. In a very densely populated city in China, we examined whether use of public hospitals by children was associated with individual-level residential proximity, and whether these associations varied with type of admission.