

# **Job Description**

Job title	Principal Public Health Intelligence Analyst
Directorate	PEOPLE : Children and Adults
Division	Public Health
Range	MPR 6
Reports to	Public Health Intelligence Manager

# Main purpose of the job:

The postholder will contribute to Medway Council's vision to enable Medway residents to get the best start, develop well, and go on to live healthy, fulfilling, independent lives by providing high-quality public health intelligence and information.

As a Principal Public Health Intelligence Analyst, you will lead and manage multiple complex analytical projects, ensuring timely delivery and high-quality outputs. This involves creating and maintaining performance dashboards, applying advanced analytical and statistical techniques, and forecasting future demand to optimise service delivery. The role requires synthesising evidence from various sources and delivering clear and actionable insights through effective communication to both technical and non-technical audiences. Building strong relationships with stakeholders, fostering a collaborative culture, and promoting a robust data culture within the Directorate are essential. Additionally, the job includes keeping up to date with best practices and innovations in data analysis and managing the performance and development of team members.

In summary, the Principal Public Health Intelligence Analyst's role is crucial in using data-driven insights to enhance services, inform strategic decisions, and ultimately improve the lives of Medway residents.

Liaise with stakeholders in a way that promotes the <u>One Medway Council Plan</u> and embeds our <u>values and</u> <u>behaviours</u>.

## Accountabilities and outcomes:

**Project management:** Lead and manage multiple complex analytical projects from inception to completion with minimal supervision, ensuring timely delivery and high-quality projects that meet business requirements and objectives.

**Performance monitoring:** Lead and coordinate the creation, maintenance, development, and monitoring of comprehensive performance dashboards and reports. Providing deeper and more meaningful insights,

enabling the organisation to better understand its performance, address inequalities, and enhance decision-making.

Advanced data analysis and interpretation: Apply advanced analytical and statistical techniques to conduct in-depth analysis and needs assessments to identify trends, patterns, inequalities and insights. Translate complex data into actionable recommendations for stakeholders to ensure that all operational and strategic decisions are evidence-based.

**Forecasting and projecting demand:** Utilise historical data, service trends, and statistical models to predict future demand. Ensure forecasts are accurate and reliable, minimising errors and discrepancies. Leading to optimised resource allocation and improved service delivery.

**Evidence synthesis:** Critically appraise and summarise complex literature, local and national policies, and academic publications with clarity and accuracy. Deliver concise, well-written reports that inform decision-making and policy development.

**Data quality assurance**: Monitor and report on the quality of data to ensure its accuracy, reliability, and integrity. Provide feedback to practitioners and managers, emphasising the importance of high-quality data. Collaborate with the service to drive continuous improvements, ensuring that analysis and reporting are based on robust data.

**Data protection:** Ensure compliance with data protection regulation and council policies by implementing best practices for data security, privacy, and governance throughout analytical processes.

**Insightful communication and presentation**: Deliver data presentations across all organisational levels, ensuring clarity, engagement, and accessibility for both technical and non-technical audiences. Ensure complex analyses are translated into clear, actionable insights for diverse stakeholders, facilitating intelligence-led decision-making and continuous improvement.

**Stakeholder engagement and collaboration:** Build and maintain strong relationships with internal and external stakeholders in multi-agency work to understand and meet their analytical needs, identify issues, and develop solutions. Foster a collaborative culture within the team and Directorate, ensuring a cohesive and integrated intelligence service.

**Best practice and innovation**: Keep up to date with the latest data sources, emerging analytical tools, and current national evidence. Implement best practice to produce innovative analysis and reporting and enhance effectiveness and efficiency.

**Data culture:** Promote a robust data culture within Public Health. Support the improvement of data literacy and analytical skills among practitioners and managers across the directorate, enabling informed intelligence led decision-making and strategic planning.

**Line management:** Monitor the performance of team members, conduct performance reviews, provide feedback, identify development needs and opportunities, arrange appropriate training, and mentor team members to aid their professional development. Oversee the recruitment processes and induction of new team members.

At the discretion of the Head of Service, such other activities as may from time to time be agreed consistent with the nature of the job described above.

## **Key Corporate Accountabilities:**

To work with colleagues to achieve service plan objectives and targets.

To understand and actively keep up to date with GDPR responsibilities, including completing regular refresher training.

Safeguarding is everyone's responsibility: all employees are required to act in such a way that safeguards the health and well-being of children and vulnerable adults.

As a corporate parent, all council employees are responsible for ensuring the well-being and positive outcomes of Medway's care-experienced children and young people.

To participate in the Performance Appraisal process and contribute to the identification of own and team development needs utilising the Career Progression Framework.

Work in accordance with the Equality Act 2010 and the Public Sector Equality Duty to eliminate unlawful discrimination, harassment and victimisation. Promoting equality of opportunity, fostering good relations and improving the quality of life and opportunities for everyone living and working in Medway.

To ensure full compliance with the Health and Safety at Work Act 1974, the Council's Health and Safety Policy and all locally agreed safe methods of work.

To fully understand and be aware of the commitment to the duty under Section 17 of the Crime and Disorder Act 1998 to prevent crime and disorder.

Promote the Medway Carbon Neutral by 2050 commitment; supporting the Council action plan to ensure we play our part in addressing the climate emergency.

Medway Council is a Category One responder in relation to the Civil Contingencies Act (2004) and as a result all staff working for the Authority may be asked to carry out Category One response duties or stand into the role of another member of staff who is responding to a Major Civil Incident.

## **Organisation:**

This role reports to the Public Health Intelligence Manager.

The post holder will have line management responsibility.

The post holder will be required to liaise with all stakeholders both internal and external to the organisation.

# Working Style:

HYBRID - a flexible working arrangement whereby an employee can undertake their work either in the office and/or partially or mainly from home on a temporary or permanent basis.

# **Person specification**

All criteria at level A are considered essential unless stated otherwise.

# Qualifications

#### Level A

• Post-graduate qualification in related discipline or equivalent work experience.

#### Level B (in addition to level A criteria)

• Recognised advanced qualification in numerate discipline, e.g., mathematics, statistics, information systems, etc.

#### Level C (in addition to levels A and B)

• Evidence of continued professional development.

# Knowledge

#### Level A

- You have a good knowledge of data security, data protection legislation and best practice.
- You understand the end-to-end lifecycle and characteristics of the data in your area of work from origin to delivery to local and national consumers.
- You understand when advanced inferential statistical techniques are needed and the different methods available.
- You understand how geographical data can be displayed to show geographical features such as simple choropleth mapping using appropriate tools.
- You understand how geographical boundaries relate to each other.
- You understand different geographies and how they can be displayed using point mapping, density mapping, choropleth maps, etc.

## Level B (in addition to level A criteria)

- You have knowledge of current Public Health interventions, services, policies, strategies, and legislation.
- You know when data can be accessed and shared and know who to approach outside the organisation for advice.
- You understand how data linkage and different types of analysis can re-identify or help anonymise data.
- You have knowledge of GDPR and consent to process data.
- You understand the limitations and assumptions behind each advanced inferential statistical technique.
- You understand the role of predictive/prescriptive analytics and their difference from descriptive analytics.
- You have knowledge of APIs and how they may benefit automation.

## Level C (in addition to levels A and B)

• You have a good knowledge of predictive, prescriptive and evaluative analytical techniques.

- You understand the difference between predictive and prescriptive analysis, and have knowledge of tools and techniques for prescriptive analysis including business modelling and algorithms.
- You understand key regression models, cluster analysis, factor analysis, principal component analysis etc.
- You understand the iterative nature of evaluative techniques.

## Experience

#### Level A

- Several years of experience in intelligence analysis, demonstrating a solid understanding of the field.
- Proven experience of working autonomously and as part of a team.
- Experience dealing with work-related pressure, for example, from deadlines, interruptions, or conflicting demand.
- Experience in creating detailed reports and/or dashboards and presenting complex data insights to both technical and non-technical stakeholders.
- Used specialist software and tools such as Power BI, R, and SQL.

## Level B (in addition to level A criteria)

- You have knowledge of current Public Health interventions, services, policies, strategies, and legislation.
- Experience independently applying the principles of General Data Protection Regulation (GDPR) and information governance.
- Hands-on experience with advanced statistical methods, data modelling, forecasting, and other complex analytical techniques.
- Proven ability to independently manage and execute technically complex intelligence projects to create insight and robust analytical products.
- Supported the creation, maintenance, and development of performance dashboards and reports.
- Led complex discussions with stakeholders about analytical projects and approaches.
- You are able to use key techniques in predictive analytics including regression methods and use them with different data types. You can select the appropriate technique for the subject.

## Level C (in addition to levels A and B)

- Provided specialist advice and guidance on advanced analytical and statistical techniques.
- Supported efforts to create a robust data culture within the service area.
- Helped to improve data literacy and analytical skills among practitioners and managers across the directorate.
- Played an active role in the implementation of best practices and innovative approaches to enhance operational efficiency and effectiveness.
- Experience mentoring and training junior analysts, fostering their professional development and contributing to a high-performing team environment.

## Skills

#### Level A

- You work with the requestor of the analysis to examine the underlying question and apply your knowledge to generate an approach to the analysis.
- You specify how data should be cleansed and prepared and ensure processes and documentation reflect this to ensure valid and replicable results.
- You understand and can communicate the limitations of the data and how it can be enriched to deliver more relevant information.
- You can determine which tools and techniques to use to explore or solve a variety of business issues.
- You apply a range of techniques to analyse data and provide insight.
- You understand when geographical mapping is appropriate and can combine it with other visualisation methods to create greater impact.
- You can produce dynamic maps based on changing data.
- You are able to build basic regression models.
- You understand how information can be misunderstood or misrepresented and understand how to convey uncertainty in your findings.
- You can turn complex data analyses into clear and compelling messages, and you can present those analyses with visualisations to communicate complex messages.
- You can tell a story using data.
- You proactively communicate findings and encourage utilisation of data for business decisionmaking.
- You can communicate accurate information to technical and non-technical audiences.
- You are able to interpret predictive/prescriptive analysis produced by others and communicate with stakeholders.

## Level B (in addition to level A criteria)

- You are able to link directly to source data using appropriate tools for data automation.
- You can use underlying coding, such as mCODE, DAX, etc. to create the most efficient datasets to visualise.
- You use advanced coding and debugging skills.
- You can produce complex data models and visualisations in R, Excel or SQL, whilst ensuring accurate linkage and data quality.
- You can produce indicators and metrics that clearly measure what is require.
- You understand and apply reliability and validity assessments to descriptive and explicative analysis.
- You apply the correct advanced inferential statistical technique to the business question.
- You select the most appropriate methods of visualisation for descriptive and explicative analysis.
- You integrate qualitative and quantitative data to augment analysis, develop complex models and devise hypotheses for testing.
- You understand the role of proxy measures in evaluation for less straightforward outcomes. You can assess these measures and quantify their uncertainty.
- You can communicate negative and positive information to stakeholders and know how to facilitate discussions within multidisciplinary teams.
- You can apply a range of statistical practices and can advise on best practice and guide others to a high standard.

- You develop deeper expertise in relevant tools, applications and systems and share your knowledge with others.
- You share your knowledge to help others develop analytical skills.
- You are able to assess your own training requirements and those of less experienced colleagues and proactively identify relevant learning opportunities.
- You embrace opportunities to add to the variety of services you and your team provide analysis to.

## Level C (in addition to levels A and B)

- You have a deep understanding of business goals and can turn these into performance measures.
- You deconstruct complex business issues and lead on the development of performance measurement regimes.
- You look beyond initial requirements, challenge assumptions and generate insight.
- You know how to give tactical and strategic recommendations that influence audiences.
- You proactively engage with stakeholders to explore their needs, search for complementary data sources, explore the limits of the available data and promote business decision-making based on the data.
- You are able to analyse the causes for a range of complex problems and utilise analytical techniques to solve them including developing new processes that have not previously been attempted.
- You can identify when there is a cause-and-effect relationship and take into account the related time lag within any evaluative analysis.
- You can evaluate previous research to determine appropriate measures for evaluation.
- You apply the correct advanced inferential statistical techniques to the business questions. You understand the limits and assumptions behind each technique.
- You are able to use key techniques in predictive analytics including regression methods and use them with different data types. You can select the appropriate technique for the subject.
- You peer-review colleagues' analysis to ensure quality and consistency.
- You engage with the wider analytical community to seek out new tools and techniques and translate those to local applications.
- You are active in the wider analytical community, sharing your work and actively engaging in a network of your peers.
- Your analytical skills and business awareness are suitably advanced for you to act as a role model and mentor for more junior colleagues.
- You support those colleagues in reflective practice, signpost opportunities to build their portfolio of work and advocate for professional registration.
- You act as an advocate for professional values and standards and promote well-being amongst your colleagues.