

Introduction

It is a challenging time for sales forces especially in the Pharma arena. Facing limited time with customers and growing competition, field sales forces need to perform at best-in-class levels to keep the top line growing.



How is Pharma Sales different?

Regular Sales:

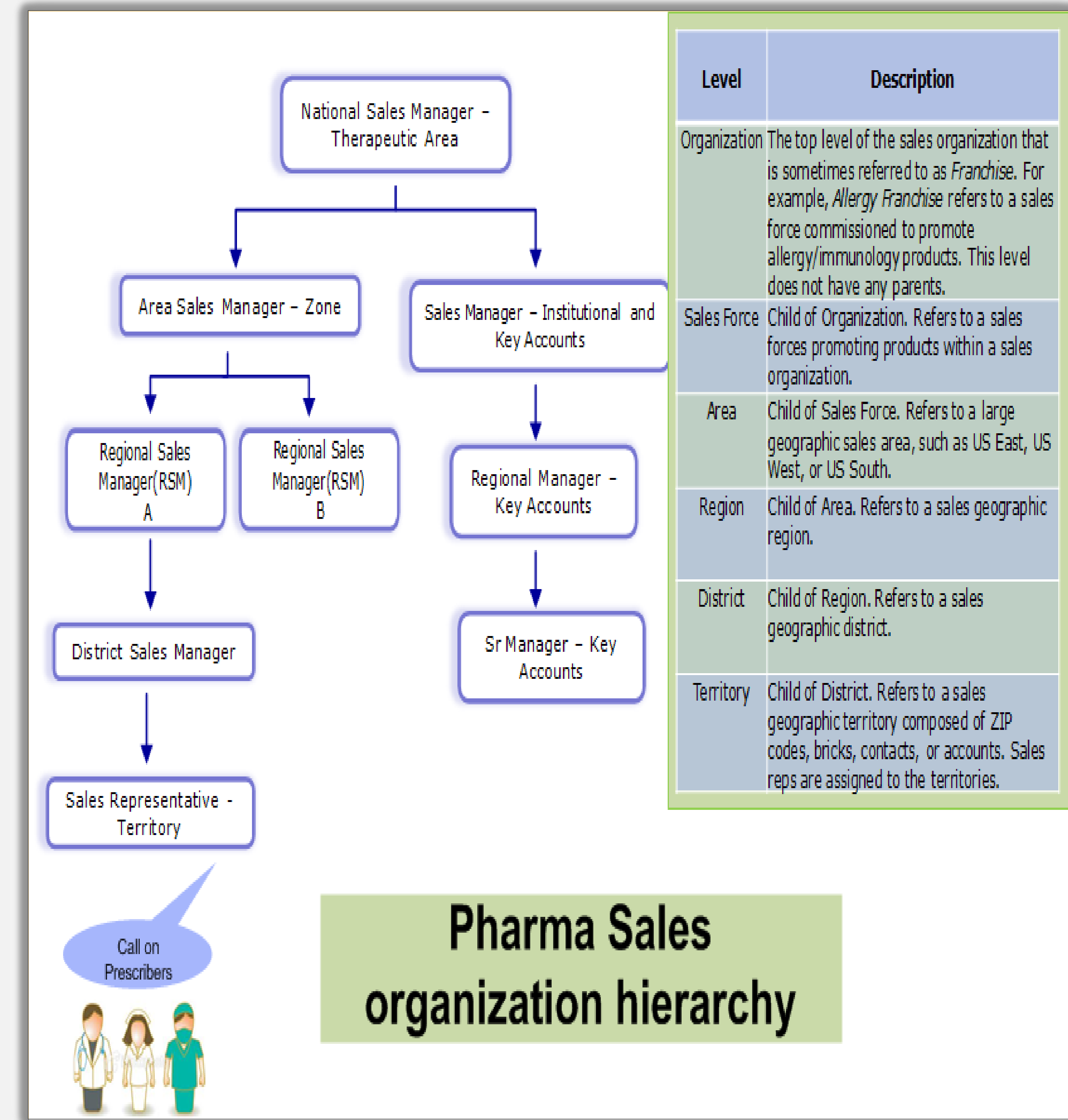
Sales Rep meets the customer → Explains about the products → Customer buys the product if satisfied → A sale is made!

Pharma Sales:

Sales Rep meets the customer (Physician) → Details about the products (Drugs) → Physician may prescribe the drug to his patients at a later time → Rep is wondering “Was my Sales call successful?!”

Who will be interested in Performance reports ?

The sales performance is of interest to the whole team at their respective levels.



“Sales organizations that fail to execute reporting and payments of incentive commissions in a timely manner will decrease sales force productivity because of lost selling time, reduced motivation and the absence of organizational trust.” – Gartner Inc.

Delivery of periodic reports to measure performance against goals will help sales force find opportunities.

The payouts need to be processed in a timely fashion and the lag time in letting Reps know their performance has to be reduced

Why does Incentive compensation require a process in place?

Rudimentary spreadsheet-based Incentive Compensation processes:

- ✗ Slow and inaccurate
- ✗ Do not provide easy visibility to the business rules of the plan
- ✗ Lack audit trails and version control, do not easily support the complex rules required for new sales force models
- ✗ Require significant manual entry and ongoing updates
- ✗ Often takes four to six weeks after receipt of the data to produce IC reports, and at least an additional 2 weeks for the payouts to be made.
- ✗ These applications create frequent disputes over sales credits and compensation payouts, which are time-consuming and costly to resolve and they create an atmosphere of distrust within the sales.

And what is required?

- ✓ Stable, fast and accurate process
- ✓ Reproducible results which support audit trails
- ✓ Periodic reporting to compare Performance Vs Goals
- ✓ Timely Goals and Payout reports
- ✓ Consistent reporting across the Sales team hierarchy

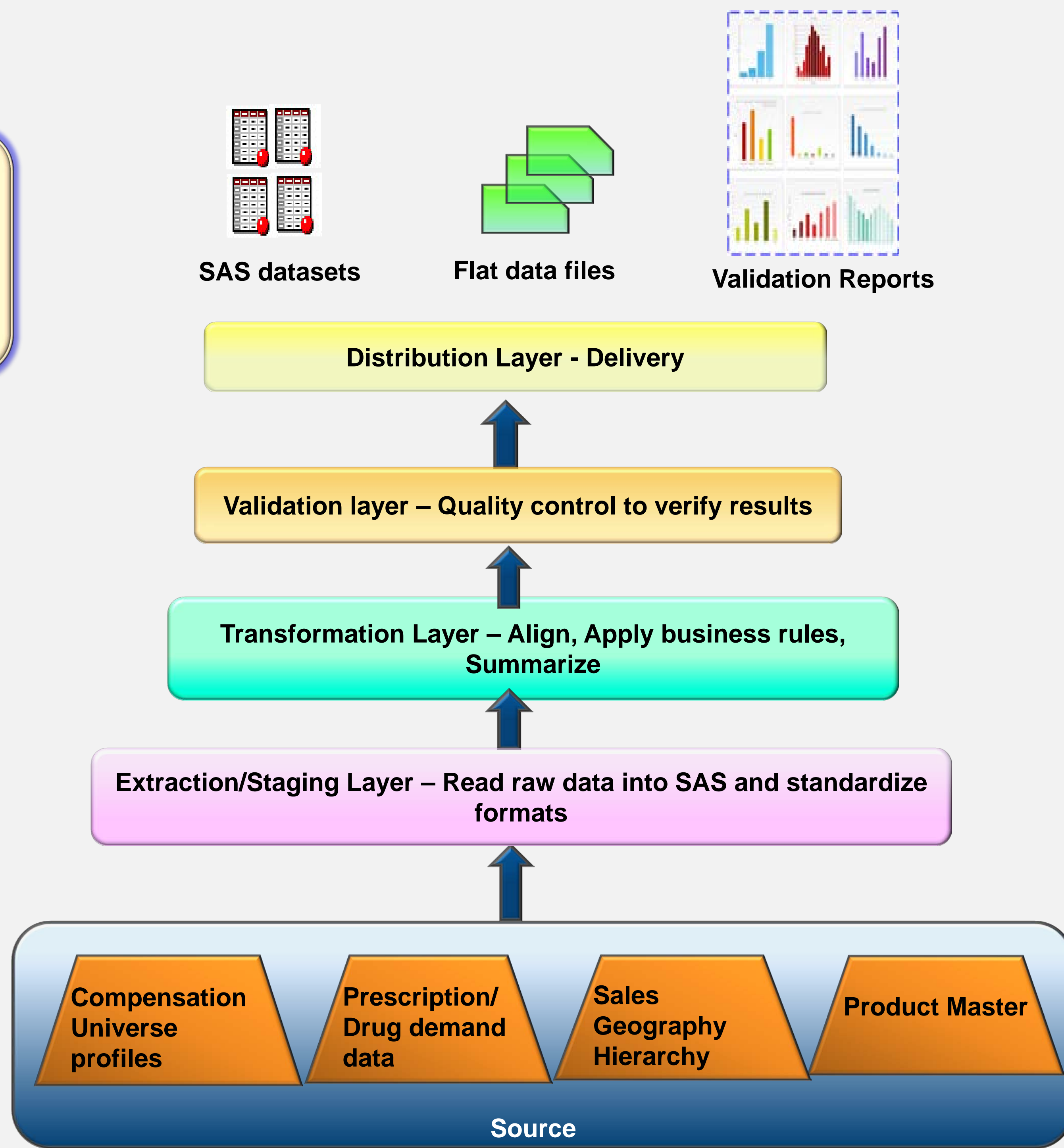
What is required for Performance reports ?

Data requirements:

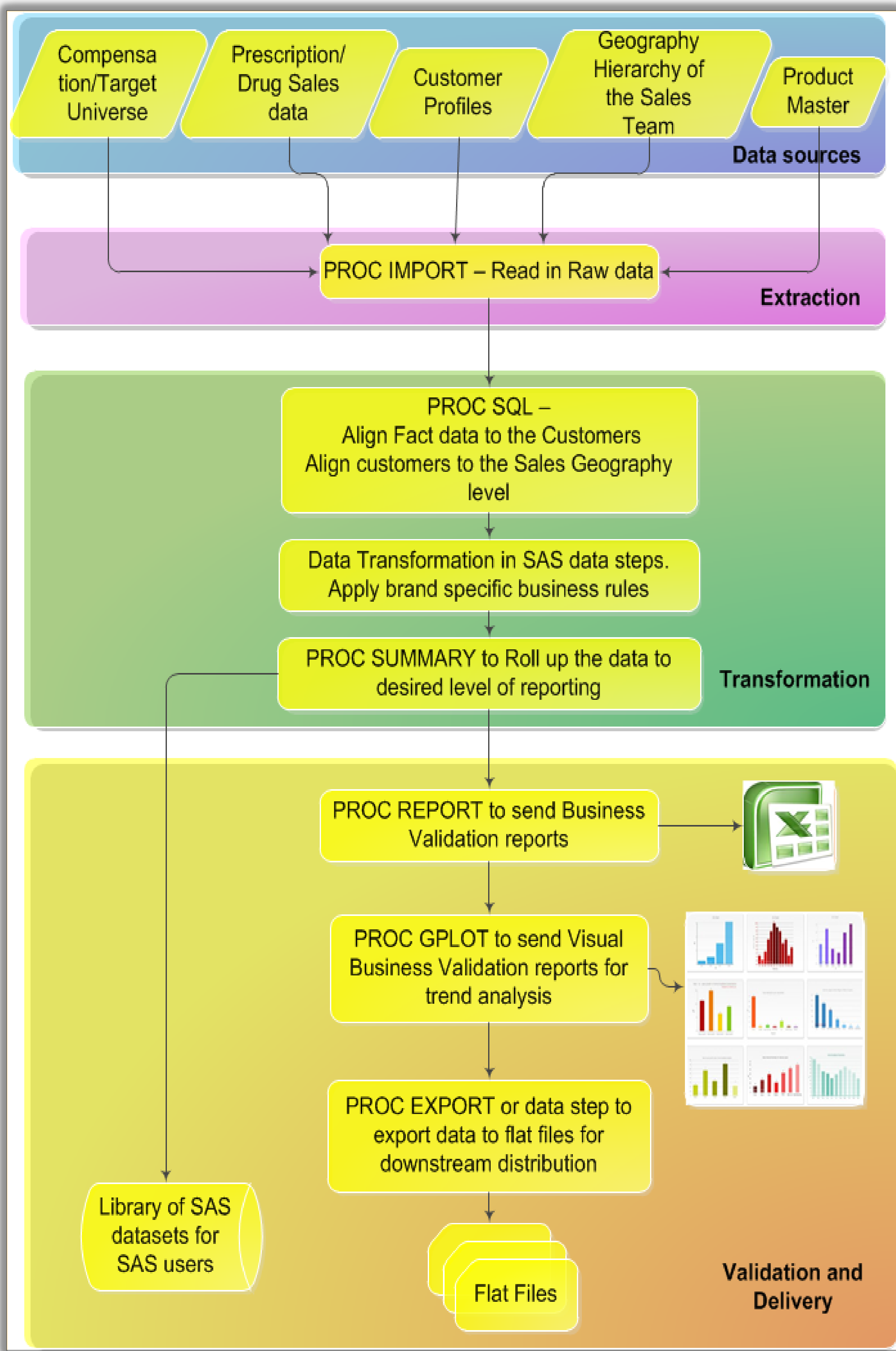
- Physician profiles with Physician specialty, Address of Practice etc.
- Aligned Compensation Universe
 - Customer to Sales territory alignment
 - Goals set based on prescribing capacity of the customers
 - Performance is measured against the same set of customers for the selling period in order to be able to compare the Goal vs Attainment.
- Customer level prescription or Drug demand data (Dollars or Units of Sales):
 - After-market sales information from external vendors.
- Hierarchy
 - Sales team structure depicted above
 - Higher geography levels relationship of the Sales Teams
 - Sales reports to be provisioned to each level of hierarchy to monitor sales.
- Product master
 - Product Hierarchy that includes Product family, Therapeutic class, Market, sub-market definitions of the entire market.

Proposed solution for Performance reporting

Design Overview



How to play with the power of SAS®?



Validation / Presentation / Analysis

PROC EXPORT to MS Excel – Current Vs Previous Month Trends in Sales Territories

| Territory | Prod | currtx1 | currtx2 | currtx3 | currtx4 | currtx5 | currtx6 | prevtx1 | prevtx2 | prevtx3 | prevtx4 | prevtx5 | prevtx6 | difftrx1 | difftrx2 | difftrx3 | difftrx4 | difftrx5 | difftrx6 | max_diff |
|-----------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|-------------|
| K12C3G | PYRUX | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 3 | 3 |
| K12P3A | PYRUX | 3 | 1 | 3 | 3 | 6 | 5 | 1 | 3 | 1 | 3 | 3 | 6 | 2 | -2 | 2 | 0 | 3 | -1 | 2 |
| K12F3F | PYRUX | 5 | 3 | 8 | 8 | 3 | 6 | 3 | 5 | 3 | 8 | 8 | 3 | 2 | -2 | 5 | 0 | -5 | 3 | 1.666666667 |
| K12F3C | PYRUX | 5 | 2 | 5 | 6 | 3 | 7 | 9 | 5 | 2 | 5 | 6 | 3 | -4 | -3 | 3 | 1 | -3 | 4 | 1.5 |
| K12C3J | PYRUX | 4 | 3 | 4 | 2 | 1 | 0 | 9 | 4 | 3 | 4 | 2 | 1 | -5 | -1 | 1 | -2 | -1 | -1 | 1 |
| K12F3H | PYRUX | 1 | 1 | 1 | 2 | 3 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | -1 | 0 | 0 | 1 | 1 | -2 | 1 |
| K12P3C | PYRUX | 2 | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 0 | 0 | 0 | 1 | 0 | -2 | 0 | 0 | 1 | -1 | 1 |
| K12C3F | PYRUX | 9 | 17 | 16 | 10 | 12 | 11 | 13 | 9 | 17 | 16 | 10 | 12 | -4 | 8 | -1 | -6 | 2 | -1 | 0.888888889 |
| K12F3D | PYRUX | 37 | 30 | 25 | 44 | 35 | 33 | 50 | 37 | 30 | 25 | 44 | 35 | -13 | -7 | -5 | 19 | -9 | -2 | 0.76 |
| K12D3H | PYRUX | 7 | 9 | 8 | 8 | 5 | 8 | 6 | 7 | 9 | 8 | 8 | 5 | 1 | 2 | -1 | 0 | -3 | 3 | 0.6 |
| K12D3J | PYRUX | 5 | 8 | 6 | 9 | 8 | 4 | 8 | 5 | 8 | 6 | 9 | 8 | -3 | 3 | -2 | 3 | -1 | -4 | 0.6 |
| K12E3F | PYRUX | 5 | 6 | 5 | 8 | 6 | 4 | 8 | 5 | 6 | 5 | 8 | 6 | -3 | 1 | -1 | 3 | -2 | -2 | 0.6 |
| K12E3B | PYRUX | 40 | 41 | 29 | 46 | 28 | 33 | 37 | 40 | 41 | 29 | 46 | 28 | 3 | 1 | -12 | 17 | -18 | 5 | 0.586206897 |
| K12D3G | PYRUX | 9 | 14 | 16 | 17 | 12 | 11 | 7 | 9 | 14 | 16 | 17 | 12 | 2 | 5 | 2 | 1 | -5 | -1 | 0.555555556 |
| K12C3D | PYRUX | 21 | 15 | 23 | 19 | 18 | 17 | 19 | 21 | 15 | 23 | 19 | 18 | 2 | -6 | 8 | -4 | -1 | -1 | 0.533333333 |
| K12A3G | PYRUX | 27 | 28 | 25 | 36 | 17 | 22 | 24 | 27 | 28 | 25 | 36 | 17 | 3 | 1 | -3 | 11 | -19 | 5 | 0.527777778 |
| K12A3B | PYRUX | 31 | 22 | 33 | 36 | 27 | 21 | 31 | 31 | 22 | 33 | 36 | 27 | 0 | -9 | 11 | 3 | -9 | -6 | 0.5 |
| K12A3D | PYRUX | 11 | 10 | 15 | 12 | 10 | 13 | 14 | 11 | 10 | 15 | 12 | 10 | -3 | -1 | 5 | -3 | -2 | 3 | 0.5 |
| K12D3E | PYRUX | 35 | 39 | 33 | 40 | 38 | 19 | 54 | 35 | 39 | 33 | 40 | 38 | -19 | 4 | -6 | 7 | -2 | -19 | 0.5 |
| K12A3A | PYRUX | 25 | 37 | 43 | 25 | 27 | 19 | 37 | 25 | 37 | 43 | 25 | 27 | -12 | 12 | 6 | -18 | 2 | -8 | 0.48 |
| K12A3F | PYRUX | 25 | 33 | 30 | 21 | 31 | 24 | 26 | 25 | 33 | 30 | 21 | 31 | -1 | 8 | -3 | -9 | 10 | -7 | 0.476190476 |
| K12F3E | PYRUX | 21 | 12 | 14 | 14 | 15 | 16 | 24 | 21 | 12 | 14 | 14 | 15 | -3 | -9 | 2 | 0 | 1 | 1 | 0.428571429 |
| K12D3A | PYRUX | 24 | 30 | 31 | 35 | 39 | 23 | 28 | 24 | 30 | 31 | 35 | 39 | -4 | 6 | 1 | 4 | 4 | -16 | 0.41025641 |
| K12B3D | PYRUX | 33 | 29 | 24 | 33 | 25 | 22 | 40 | 33 | 29 | 24 | 33 | 25 | -7 | -4 | -5 | 9 | -8 | -3 | 0.375 |

PROC REPORT - Outputs for the overall drug trend

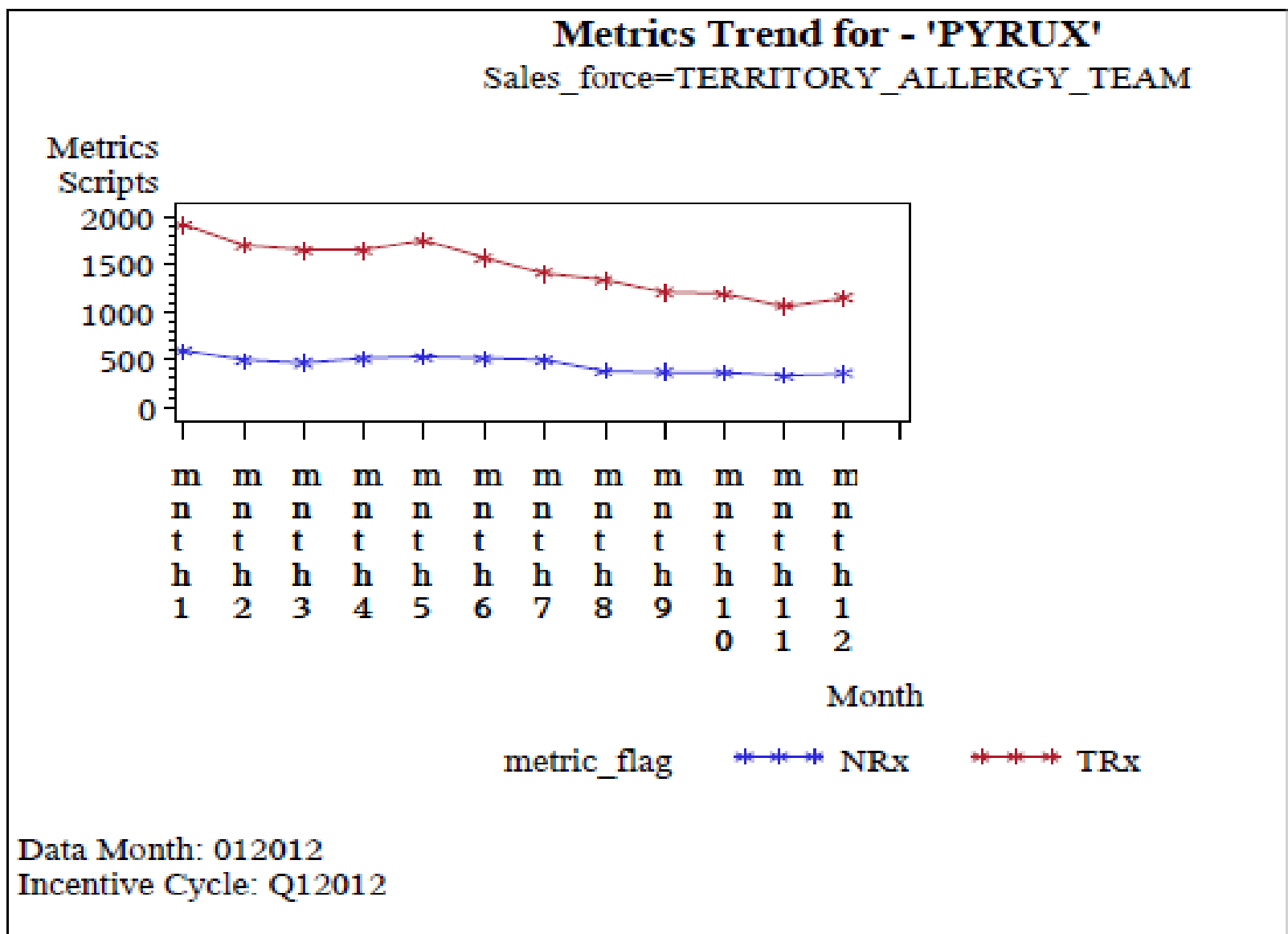
Using Proc REPORT for validation outputs
Summary by product in the Therapeutic class for the recent 4 months trend
10:15 Wednesday, March 14, 2012

| Product*--- | Therapeutic Class*--- | trx1 | trx2 | trx3 | trx4 |
|-------------|-----------------------|------|------|------|------|
| PYRUX | IMMUNOSUPPRESSANT | 1919 | 1706 | 1648 | 1648 |

Using Proc REPORT for validation outputs
How does Total Rx sales look across the Physician specialty group for the recent 6 months
10:15 Wednesday, March 14, 2012

| Sales_team | Specialty | trx1 | trx2 | trx3 | trx4 | trx5 | trx6 |
|--------------|-----------|---------|---------|---------|---------|---------|---------|
| ALLERGY_TEAM | ALLERGY | 1919.00 | 1706.00 | 1648.00 | 1648.00 | 1750.00 | 1576.00 |

PROC GPLOT based Graphical validation report



DATA_NULL export to flat file for downstream systems

| | | | | | | | | | | |
|--------------|---------|----------|------------|-----------|-------|----|-----|----|-----|----|
| ALLERGY_TEAM | ALLERGY | K K12A3A | ADJUNCTIVE | IMMUNOSUP | PYRUX | 9 | 37 | 5 | 25 | 11 |
| ALLERGY_TEAM | ALLERGY | K K12A3B | ADJUNCTIVE | IMMUNOSUP | PYRUX | 15 | 31 | 11 | 31 | 6 |
| ALLERGY_TEAM | ALLERGY | K K12A3C | ADJUNCTIVE | IMMUNOSUP | PYRUX | 6 | 24 | 8 | 29 | 5 |
| ALLERGY_TEAM | ALLERGY | K K12A3D | ADJUNCTIVE | IMMUNOSUP | PYRUX | 3 | 14 | 6 | 11 | 2 |
| ALLERGY_TEAM | ALLERGY | K K12A3E | ADJUNCTIVE | IMMUNOSUP | PYRUX | 38 | 151 | 36 | 137 | 27 |
| ALLERGY_TEAM | ALLERGY | K K12A3F | ADJUNCTIVE | IMMUNOSUP | PYRUX | 5 | 26 | 9 | 25 | 10 |
| ALLERGY_TEAM | ALLERGY | K K12A3G | ADJUNCTIVE | IMMUNOSUP | PYRUX | 4 | 24 | 4 | 27 | 5 |
| ALLERGY_TEAM | ALLERGY | K K12B3A | ADJUNCTIVE | IMMUNOSUP | PYRUX | 7 | 38 | 10 | 43 | 10 |
| ALLERGY_TEAM | ALLERGY | K K12B3B | ADJUNCTIVE | IMMUNOSUP | PYRUX | 11 | 53 | 9 | 42 | 13 |
| ALLERGY_TEAM | ALLERGY | K K12B3C | ADJUNCTIVE | IMMUNOSUP | PYRUX | 18 | 49 | 11 | 44 | 14 |
| ALLERGY_TEAM | ALLERGY | K K12B3D | ADJUNCTIVE | IMMUNOSUP | PYRUX | 8 | 40 | 7 | 33 | 9 |
| ALLERGY_TEAM | ALLERGY | K K12B3E | ADJUNCTIVE | IMMUNOSUP | PYRUX | 6 | 27 | 8 | 25 | 9 |
| ALLERGY_TEAM | ALLERGY | K K12B3F | ADJUNCTIVE | IMMUNOSUP | PYRUX | 22 | 64 | 17 | 59 | 13 |
| ALLERGY_TEAM | ALLERGY | K K12C3A | ADJUNCTIVE | IMMUNOSUP | PYRUX | 63 | 139 | 59 | 130 | 40 |
| ALLERGY_TEAM | ALLERGY | K K12C3B | ADJUNCTIVE | IMMUNOSUP | PYRUX | 18 | 69 | 14 | 54 | 14 |
| ALLERGY_TEAM | ALLERGY | K K12C3C | ADJUNCTIVE | IMMUNOSUP | PYRUX | 14 | 37 | 4 | 30 | 4 |
| ALLERGY_TEAM | ALLERGY | K K12C3D | ADJUNCTIVE | IMMUNOSUP | PYRUX | 4 | 19 | 5 | 21 | 4 |
| ALLERGY_TEAM | ALLERGY | K K12C3E | ADJUNCTIVE | IMMUNOSUP | PYRUX | 22 | 140 | 23 | 139 | 26 |
| ALLERGY_TEAM | ALLERGY | K K12C3F | ADJUNCTIVE | IMMUNOSUP | PYRUX | 1 | 13 | 3 | 9 | 5 |
| ALLERGY_TEAM | ALLERGY | K K12C3G | ADJUNCTIVE | IMMUNOSUP | PYRUX | 0 | 0 | 0 | 0 | 0 |
| ALLERGY_TEAM | ALLERGY | K K12C3H | ADJUNCTIVE | IMMUNOSUP | PYRUX | 10 | 28 | 2 | 27 | 7 |
| ALLERGY_TEAM | ALLERGY | K K12C3J | ADJUNCTIVE | IMMUNOSUP | PYRUX | 3 | 9 | 1 | 4 | 0 |

Conclusion

This presentation assuming a traditional way of Performance measurement using the historical sales data to set quotas and compensate the sales representatives.

This SAS solution can be extended to accommodate a multitude of other business needs like below:

- Apportioning of sales for shared territories, bundled products with different weight for promotion, compensate based on Market Share of the drug as opposed to the Volume of sales etc. Also field force modifications, re-organizations, hierarchy changes etc can be accommodated with some tweaks to the process, as applicable.
- The intent of this poster is to give an overview of some of the related concepts and to help you approach a similar requirement using SAS.

Acknowledgments

Thanks to all who helped me understand the presented concepts, my colleagues, customers and family for their support and encouragement.

Contact Information

Your comments and questions are valued and encouraged.
Ramya Purushothaman

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